

ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศ



Analysis / Test Report



TESTING

No.0042

Lot ID: 2295407

Date Received : Aug 23, 2022

Date Reported : Sep 01, 2022

Report Number : 2394525-1C1

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Description	Air Quality				
Location	โรงงานผลิตสารเคมีอุตสาหกรรม (GPS 47P 0735185, 1405871)				
Date Analysis Commenced	Aug 24, 2022				
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				

Sample Number	Sampled Date	Total Suspended Particulate (mg/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2295407-1	Aug 15 - Aug 16, 2022	0.044	0.015	755	30
2295407-2	Aug 16 - Aug 17, 2022	0.050	0.013	755	30
2295407-3	Aug 17 - Aug 18, 2022	0.036	0.009	755	32
2295407-4	Aug 18 - Aug 19, 2022	0.038	0.009	755	32
2295407-5	Aug 19 - Aug 20, 2022	0.040	0.011	755	32
2295407-6	Aug 20 - Aug 21, 2022	0.044	0.013	755	30
2295407-7	Aug 21 - Aug 22, 2022	0.053	0.016	755	30
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Apichart Wilars

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING

No.0042

Lot ID: 2293102

Date Received : Aug 23, 2022

Date Reported : Aug 27, 2022

Report Number: 2412756-1

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Description	Air Quality				
Location	โรงงานผลิตสารเคมีอุตสาหกรรม (GPS 47P 0731529, 1402602)				
Date Analysis Commenced	Aug 24, 2022				
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				

Sample Number	Sampled Date	Total Suspended Particulate (mg/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2293102-1	Aug 15 - Aug 16, 2022	0.021	0.012	755	30
2293102-2	Aug 16 - Aug 17, 2022	0.019	0.012	755	30
2293102-3	Aug 17 - Aug 18, 2022	0.025	0.010	755	32
2293102-4	Aug 18 - Aug 19, 2022	0.014	0.010	755	32
2293102-5	Aug 19 - Aug 20, 2022	0.019	0.012	755	32
2293102-6	Aug 20 - Aug 21, 2022	0.036	0.020	755	30
2293102-7	Aug 21 - Aug 22, 2022	0.033	0.019	755	30
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Apichart Wilars

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2292986

Date Received : Aug 23, 2022
Date Reported : Aug 27, 2022
Report Number: 2388705-1

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Description Air Quality
Location วัดหนองจอก (GPS 47P 0736058, 1402077)
Date Analysis Commenced Aug 24, 2022
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2292986-1	Aug 15 - Aug 16, 2022	0.024	0.011	755	30
2292986-2	Aug 16 - Aug 17, 2022	0.010	0.007	755	30
2292986-3	Aug 17 - Aug 18, 2022	0.011	0.007	755	32
2292986-4	Aug 18 - Aug 19, 2022	0.016	0.011	755	32
2292986-5	Aug 19 - Aug 20, 2022	0.017	0.006	755	32
2292986-6	Aug 20 - Aug 21, 2022	0.020	0.015	755	30
2292986-7	Aug 21 - Aug 22, 2022	0.026	0.022	755	30
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Apichart Wilars

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2295491

Date Received : Aug 23, 2022
Date Reported : Sep 01, 2022
Report Number : 2394579-1C1

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Description Air Quality
Location วัดหนองจอก (GPS 47P 0730822, 1407369)
Date Analysis Commenced Aug 24, 2022
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2295491-1	Aug 15 - Aug 16, 2022	0.060	0.011	755	30
2295491-2	Aug 16 - Aug 17, 2022	0.103	0.013	755	30
2295491-3	Aug 17 - Aug 18, 2022	0.085	0.010	755	32
2295491-4	Aug 18 - Aug 19, 2022	0.076	0.013	755	32
2295491-5	Aug 19 - Aug 20, 2022	0.071	0.011	755	32
2295491-6	Aug 20 - Aug 21, 2022	0.072	0.013	755	30
2295491-7	Aug 21 - Aug 22, 2022	0.070	0.015	755	30
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Apichart Wilars

Approved by

Thanita K.

Thanita Kulsuriwong
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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

Lot ID: 2293015
Date Received : Aug 23, 2022
Date Reported : Sep 03, 2022
Report Number : 2388863-1

P/O :
Project Name :
Project Location : GHECO-ONE

Sample Number 2293015-1
Sampled Date Aug 15, 2022
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47P 0729829, 1403305)
Date Analysis Commenced Aug 25, 2022
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag
Barometric Pressure 755 mmHg
Atmospheric Temperature 30.0 °C

Page 1 of 7

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Particulate matter as PM 10	15/08/22 - 16/08/22	mg/m3	-	0.002	0.018	0.12	US EPA 40 CFR Part 50, Appendix J	NEB No.24 Rayong	
Total Suspended Particulate	15/08/22 - 16/08/22	mg/m3	-	0.002	0.041	0.33	US EPA 40 CFR Part 50, Appendix B	NEB No.24 Rayong	
Metals Testing									
Arsenic *	15/08/22 - 16/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Cadmium *	15/08/22 - 16/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Lead *	15/08/22 - 16/08/22	ug/m3	-	0.01	<0.01	1.5(1)	Based on US EPA, IO Compendium Method IO-3.4	NEB No.10 Bangkok	
Mercury (Particle Phase) *	15/08/22 - 16/08/22	ug/m3	-	0.0005	<0.0005	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok

Guideline :

NEB No.10 : Notification of the National Environmental Board. No.10, 1995 (B.E.2538); (1) Guideline for 1 month Average value.
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Apichart Wilars

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

Lot ID: 2293015
Date Received : Aug 23, 2022
Date Reported : Sep 03, 2022
Report Number : 2388863-1

P/O :
Project Name :
Project Location : GHECO-ONE

Sample Number 2293015-2
Sampled Date Aug 16, 2022
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47P 0729829, 1403305)
Date Analysis Commenced Aug 25, 2022
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag
Barometric Pressure 755 mmHg
Atmospheric Temperature 30.0 °C

Page 2 of 7

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Particulate matter as PM 10	16/08/22 - 17/08/22	mg/m3	-	0.002	0.013	0.12	US EPA 40 CFR Part 50, Appendix J	NEB No.24 Rayong	
Total Suspended Particulate	16/08/22 - 17/08/22	mg/m3	-	0.002	0.036	0.33	US EPA 40 CFR Part 50, Appendix B	NEB No.24 Rayong	
Metals Testing									
Arsenic *	16/08/22 - 17/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Cadmium *	16/08/22 - 17/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Lead *	16/08/22 - 17/08/22	ug/m3	-	0.01	<0.01	1.5(1)	Based on US EPA, IO Compendium Method IO-3.4	NEB No.10 Bangkok	
Mercury (Particle Phase) *	16/08/22 - 17/08/22	ug/m3	-	0.0005	<0.0005	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok

Guideline :

NEB No.10 : Notification of the National Environmental Board. No.10, 1995 (B.E.2538); (1) Guideline for 1 month Average value.
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Apichart Wilars

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293015
Date Received : Aug 23, 2022
Date Reported : Sep 03, 2022
Report Number : 2388863-1

Page 3 of 7

Sample Number 2293015-3
Sampled Date Aug 17, 2022
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47P 0729829, 1403305)
Date Analysis Commenced Aug 25, 2022
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag
Barometric Pressure 755 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Particulate matter as PM 10	17/08/22 - 18/08/22	mg/m3	-	0.002	0.011	0.12	US EPA 40 CFR Part 50, Appendix J	NEB No.24 Rayong	
Total Suspended Particulate	17/08/22 - 18/08/22	mg/m3	-	0.002	0.029	0.33	US EPA 40 CFR Part 50, Appendix B	NEB No.24 Rayong	
Metals Testing									
Arsenic *	17/08/22 - 18/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Cadmium *	17/08/22 - 18/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Lead *	17/08/22 - 18/08/22	ug/m3	-	0.01	<0.01	1.5(1)	Based on US EPA, IO Compendium Method IO-3.4	NEB No.10 Bangkok	
Mercury (Particle Phase) *	17/08/22 - 18/08/22	ug/m3	-	0.0005	<0.0005	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok

Guideline :

NEB No.10 : Notification of the National Environmental Board. No.10, 1995 (B.E.2538); (1) Guideline for 1 month Average value.
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Apichart Wilars

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293015
Date Received : Aug 23, 2022
Date Reported : Sep 03, 2022
Report Number : 2388863-1

Page 4 of 7

Sample Number 2293015-4
Sampled Date Aug 18, 2022
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47P 0729829, 1403305)
Date Analysis Commenced Aug 25, 2022
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag
Barometric Pressure 755 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Particulate matter as PM 10	18/08/22 - 19/08/22	mg/m3	-	0.002	0.013	0.12	US EPA 40 CFR Part 50, Appendix J	NEB No.24 Rayong	
Total Suspended Particulate	18/08/22 - 19/08/22	mg/m3	-	0.002	0.039	0.33	US EPA 40 CFR Part 50, Appendix B	NEB No.24 Rayong	
Metals Testing									
Arsenic *	18/08/22 - 19/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Cadmium *	18/08/22 - 19/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Lead *	18/08/22 - 19/08/22	ug/m3	-	0.01	<0.01	1.5(1)	Based on US EPA, IO Compendium Method IO-3.4	NEB No.10 Bangkok	
Mercury (Particle Phase) *	18/08/22 - 19/08/22	ug/m3	-	0.0005	<0.0005	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok

Guideline :

NEB No.10 : Notification of the National Environmental Board. No.10, 1995 (B.E.2538); (1) Guideline for 1 month Average value.
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Apichart Wilars

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293015
Date Received : Aug 23, 2022
Date Reported : Sep 03, 2022
Report Number : 2388863-1

Page 5 of 7

Sample Number 2293015-5
Sampled Date Aug 19, 2022
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47P 0729829, 1403305)
Date Analysis Commenced Aug 25, 2022
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag
Barometric Pressure 755 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Particulate matter as PM 10	19/08/22 - 20/08/22	mg/m3	-	0.002	0.014	0.12	US EPA 40 CFR Part 50, Appendix J	NEB No.24 Rayong	
Total Suspended Particulate	19/08/22 - 20/08/22	mg/m3	-	0.002	0.036	0.33	US EPA 40 CFR Part 50, Appendix B	NEB No.24 Rayong	
Metals Testing									
Arsenic *	19/08/22 - 20/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Cadmium *	19/08/22 - 20/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Lead *	19/08/22 - 20/08/22	ug/m3	-	0.01	<0.01	1.5(1)	Based on US EPA, IO Compendium Method IO-3.4	NEB No.10 Bangkok	
Mercury (Particle Phase) *	19/08/22 - 20/08/22	ug/m3	-	0.0005	<0.0005	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok

Guideline :
NEB No.10 : Notification of the National Environmental Board. No.10, 1995 (B.E.2538); (1) Guideline for 1 month Average value.
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Apichart Wilars

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293015
Date Received : Aug 23, 2022
Date Reported : Sep 03, 2022
Report Number : 2388863-1

Page 6 of 7

Sample Number 2293015-6
Sampled Date Aug 20, 2022
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47P 0729829, 1403305)
Date Analysis Commenced Aug 25, 2022
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag
Barometric Pressure 755 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Particulate matter as PM 10	20/08/22 - 21/08/22	mg/m3	-	0.002	0.016	0.12	US EPA 40 CFR Part 50, Appendix J	NEB No.24 Rayong	
Total Suspended Particulate	20/08/22 - 21/08/22	mg/m3	-	0.002	0.040	0.33	US EPA 40 CFR Part 50, Appendix B	NEB No.24 Rayong	
Metals Testing									
Arsenic *	20/08/22 - 21/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Cadmium *	20/08/22 - 21/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Lead *	20/08/22 - 21/08/22	ug/m3	-	0.01	<0.01	1.5(1)	Based on US EPA, IO Compendium Method IO-3.4	NEB No.10 Bangkok	
Mercury (Particle Phase) *	20/08/22 - 21/08/22	ug/m3	-	0.0005	<0.0005	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok

Guideline :
NEB No.10 : Notification of the National Environmental Board. No.10, 1995 (B.E.2538); (1) Guideline for 1 month Average value.
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Apichart Wilars

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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19517-21/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Sample Number 2293015-7
Sampled Date Aug 21, 2022
Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47P 0729829, 1403305)
Date Analysis Commenced Aug 25, 2022
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag
Barometric Pressure 755 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Particulate matter as PM 10	21/08/22 - 22/08/22	mg/m3	-	0.002	0.016	0.12	US EPA 40 CFR Part 50, Appendix J	NEB No.24 Rayong	
Total Suspended Particulate	21/08/22 - 22/08/22	mg/m3	-	0.002	0.044	0.33	US EPA 40 CFR Part 50, Appendix B	NEB No.24 Rayong	
Metals Testing									
Arsenic *	21/08/22 - 22/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Cadmium *	21/08/22 - 22/08/22	ug/m3	-	0.01	<0.01	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok
Lead *	21/08/22 - 22/08/22	ug/m3	-	0.01	<0.01	1.5(1)	Based on US EPA, IO Compendium Method IO-3.4	NEB No.10 Bangkok	
Mercury (Particle Phase) *	21/08/22 - 22/08/22	ug/m3	-	0.0005	<0.0005	No Standard	Based on US EPA, IO Compendium Method IO-3.4	-	Bangkok

Guideline :
NEB No.10 : Notification of the National Environmental Board. No.10, 1995 (B.E.2538); (1) Guideline for 1 month Average value.
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
Sampled By : Apichart Wilars

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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TESTING
No.0042

Lot ID: 2293015
Date Received : Aug 23, 2022
Date Reported : Sep 03, 2022
Report Number : Z388863-1

Page 7 of 7



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Sample Description Air Quality
Location กรุงเทพมหานคร (GPS 47P 0729433, 1412978)
Date Analysis Commenced Aug 24, 2022
Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2293100-1	Aug 15 - Aug 16, 2022	0.043	0.021	755	30
2293100-2	Aug 16 - Aug 17, 2022	0.029	0.013	755	30
2293100-3	Aug 17 - Aug 18, 2022	0.076	0.015	755	32
2293100-4	Aug 18 - Aug 19, 2022	0.077	0.032	755	32
2293100-5	Aug 19 - Aug 20, 2022	0.077	0.021	755	32
2293100-6	Aug 20 - Aug 21, 2022	0.069	0.022	755	30
2293100-7	Aug 21 - Aug 22, 2022	0.085	0.034	755	30
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Apichart Wilars

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2293101

Date Received : Aug 23, 2022

Date Reported : Aug 27, 2022

Report Number: 2388847-1

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Page 1 of 1

Sample Description	Air Quality				
Location	โรงงานอุตสาหกรรม (GPS 47P 0725073, 1412550)				
Date Analysis Commenced	Aug 24, 2022				
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				
Sample Number	Sampled Date	Total Suspended Particulate (mg/m ³)	Particulate Matter (PM-10) (mg/m ³)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2293101-1	Aug 15 - Aug 16, 2022	0.027	0.015	755	30
2293101-2	Aug 16 - Aug 17, 2022	0.019	0.011	755	30
2293101-3	Aug 17 - Aug 18, 2022	0.017	0.010	755	32
2293101-4	Aug 18 - Aug 19, 2022	0.018	0.013	755	32
2293101-5	Aug 19 - Aug 20, 2022	0.023	0.015	755	32
2293101-6	Aug 20 - Aug 21, 2022	0.029	0.019	755	30
2293101-7	Aug 21 - Aug 22, 2022	0.025	0.016	755	30
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Apichart Wilars

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2295403

Date Received : Aug 23, 2022

Date Reported : Aug 31, 2022

Report Number: 2394535-1 C1

Page 1 of 1

Sample Description	Air Quality						
Location	โรงงานอุตสาหกรรม (GPS 47P 073185, 1405871)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2295403-1	2295403-2	2295403-3	2295403-4	2295403-5	2295403-6	2295403-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
09:00 AM - 10:00 AM	0.008	0.011	0.008	0.009	0.007	0.010	0.010
10:00 AM - 11:00 AM	0.008	0.011	0.009	0.005	0.007	0.009	0.008
11:00 AM - 12:00 PM	0.008	0.011	0.016	0.013	0.012	0.009	0.008
12:00 PM - 01:00 PM	0.009	0.010	0.012	0.013	0.011	0.010	0.009
01:00 PM - 02:00 PM	0.012	0.008	0.011	0.010	0.009	0.009	0.008
02:00 PM - 03:00 PM	0.006	0.007	0.008	0.010	0.010	0.008	0.009
03:00 PM - 04:00 PM	0.004	0.010	0.009	0.011	0.012	0.008	0.008
04:00 PM - 05:00 PM	0.008	0.012	0.010	0.012	0.011	0.010	0.007
05:00 PM - 06:00 PM	0.011	0.013	0.012	0.011	0.010	0.010	0.008
06:00 PM - 07:00 PM	0.009	0.011	0.009	0.010	0.011	0.008	0.007
07:00 PM - 08:00 PM	0.014	0.009	0.012	0.010	0.010	0.012	0.008
08:00 PM - 09:00 PM	0.015	0.012	0.013	0.012	0.012	0.014	0.009
09:00 PM - 10:00 PM	0.015	0.014	0.016	0.014	0.015	0.016	0.011
10:00 PM - 11:00 PM	0.012	0.014	0.014	0.018	0.014	0.017	0.012
11:00 PM - 12:00 AM	0.012	0.015	0.017	0.012	0.013	0.018	0.012
12:00 AM - 01:00 AM	0.012	0.012	0.011	0.011	0.011	0.012	0.008
01:00 AM - 02:00 AM	0.009	0.010	0.014	0.008	0.013	0.010	0.012
02:00 AM - 03:00 AM	0.007	0.013	0.012	0.008	0.012	0.012	0.012
03:00 AM - 04:00 AM	0.006	0.013	0.011	0.008	0.006	0.011	0.008
04:00 AM - 05:00 AM	0.008	0.011	0.012	0.010	0.008	0.006	0.009
05:00 AM - 06:00 AM	0.008	0.010	0.011	0.009	0.010	0.007	0.008
06:00 AM - 07:00 AM	0.009	0.012	0.012	0.007	0.009	0.008	0.010
07:00 AM - 08:00 AM	0.009	0.015	0.010	0.004	0.005	0.010	0.008
08:00 AM - 09:00 AM	0.007	0.012	0.009	0.008	0.008	0.010	0.010
Average	0.009	0.012	0.012	0.010	0.010	0.011	0.009
1hr - Maximum	0.015	0.015	0.017	0.018	0.015	0.018	0.012
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

Approved by

Saranya C.

Saranya Chalemthamrong
Scientist (4)

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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293091
Date Received : Aug 23, 2022
Date Reported : Aug 29, 2022
Report Number: 2388824-1

Page 1 of 1

Sample Description	Air Quality						
Location	ต.บึงฉลวย อ.เมืองราชบุรี (GPS 47P 0731529, 1402602)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2293091-1	2293091-2	2293091-3	2293091-4	2293091-5	2293091-6	2293091-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
09:00 AM - 10:00 AM	0.006	0.006	0.005	0.005	0.004	0.005	0.008
10:00 AM - 11:00 AM	0.002	0.005	0.005	0.005	0.004	0.006	0.005
11:00 AM - 12:00 PM	0.007	0.006	0.006	0.007	0.006	0.008	0.012
12:00 PM - 01:00 PM	0.010	0.011	0.007	0.007	0.006	0.006	0.017
01:00 PM - 02:00 PM	0.010	0.008	0.007	0.012	0.010	0.007	0.014
02:00 PM - 03:00 PM	0.008	0.013	0.012	0.009	0.010	0.008	0.017
03:00 PM - 04:00 PM	0.010	0.014	0.010	0.010	0.008	0.007	0.013
04:00 PM - 05:00 PM	0.008	0.011	0.009	0.008	0.009	0.005	0.010
05:00 PM - 06:00 PM	0.008	0.010	0.007	0.008	0.007	0.004	0.009
06:00 PM - 07:00 PM	0.006	0.007	0.007	0.006	0.005	0.002	0.006
07:00 PM - 08:00 PM	0.005	0.006	0.007	0.006	0.005	0.002	0.008
08:00 PM - 09:00 PM	0.004	0.005	0.006	0.005	0.004	0.002	0.006
09:00 PM - 10:00 PM	0.004	0.004	0.005	0.004	0.003	0.002	0.004
10:00 PM - 11:00 PM	0.004	0.005	0.006	0.004	0.003	0.002	0.004
11:00 PM - 12:00 AM	0.006	0.005	0.005	0.004	0.004	0.002	0.004
12:00 AM - 01:00 AM	0.005	0.004	0.005	0.004	0.004	0.002	0.003
01:00 AM - 02:00 AM	0.007	0.006	0.005	0.004	0.004	0.004	0.004
02:00 AM - 03:00 AM	0.006	0.006	0.007	0.005	0.004	0.005	0.006
03:00 AM - 04:00 AM	0.005	0.006	0.006	0.004	0.005	0.003	0.004
04:00 AM - 05:00 AM	0.006	0.006	0.006	0.004	0.005	0.003	0.006
05:00 AM - 06:00 AM	0.005	0.006	0.007	0.006	0.004	0.008	0.007
06:00 AM - 07:00 AM	0.004	0.006	0.005	0.003	0.002	0.012	0.009
07:00 AM - 08:00 AM	0.007	0.006	0.004	0.002	0.004	0.009	0.004
08:00 AM - 09:00 AM	0.007	0.008	0.005	0.003	0.004	0.006	0.003
Average	0.006	0.007	0.006	0.006	0.005	0.005	0.008
1hr - Maximum	0.010	0.014	0.012	0.012	0.010	0.012	0.017
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

Approved by

Saranya C.
Saranya Chalemthamrong
Scientist (4)

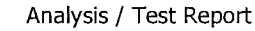
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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2292984
Date Received : Aug 23, 2022
Date Reported : Aug 29, 2022
Report Number: 2388715-1

Page 1 of 1

Sample Description	Air Quality						
Location	กรุงเทพมหานคร-บางปะกุง (GPS 47P 0736058, 1402077)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2292984-1	2292984-2	2292984-3	2292984-4	2292984-5	2292984-6	2292984-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
11:00 AM - 12:00 PM	0.002	0.003	0.014	0.002	0.004	0.004	0.003
12:00 PM - 01:00 PM	0.003	0.003	0.002	0.002	0.003	0.003	0.003
01:00 PM - 02:00 PM	0.004	0.003	0.002	0.002	0.003	0.003	0.003
02:00 PM - 03:00 PM	0.005	0.003	0.003	0.002	0.004	0.003	0.004
03:00 PM - 04:00 PM	0.003	0.002	0.003	0.002	0.002	0.005	0.003
04:00 PM - 05:00 PM	0.003	0.002	0.003	0.002	0.003	0.003	0.003
05:00 PM - 06:00 PM	0.002	0.002	0.004	0.004	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.002	0.001	0.001	0.001
08:00 PM - 09:00 PM	0.001	0.001	0.004	0.001	0.002	0.001	0.002
09:00 PM - 10:00 PM	0.002	0.001	0.002	0.001	0.002	0.001	0.001
10:00 PM - 11:00 PM	0.002	0.001	0.002	0.003	0.001	0.001	0.001
11:00 PM - 12:00 AM	0.001	0.001	0.002	0.002	0.002	0.001	<0.001
12:00 AM - 01:00 AM	0.001	0.001	0.002	0.005	0.001	0.001	0.001
01:00 AM - 02:00 AM	0.002	0.002	0.002	0.002	0.001	0.002	0.001
02:00 AM - 03:00 AM	0.002	0.002	0.002	0.002	0.001	0.001	0.002
03:00 AM - 04:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.003	0.007	0.004	0.006	0.004	0.006	0.003
05:00 AM - 06:00 AM	0.004	0.004	0.004	0.004	0.004	0.005	0.003
06:00 AM - 07:00 AM	0.003	0.002	0.004	0.003	0.003	0.003	0.004
07:00 AM - 08:00 AM	0.005	0.003	0.017	0.005	0.003	0.003	0.002
08:00 AM - 09:00 AM	0.002	0.006	0.004	0.003	0.003	0.004	0.010
09:00 AM - 10:00 AM	0.002	0.003	0.002	0.003	0.002	0.003	0.001
10:00 AM - 11:00 AM	0.002	0.002	0.002	0.003	0.004	0.003	0.007
Average	0.003	0.003	0.004	0.003	0.002	0.003	0.003
1hr - Maximum	0.005	0.007	0.017	0.006	0.004	0.006	0.010
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

Approved by

Saranya C.
Saranya Chalermthamrong
Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2295424

Date Received : Aug 23, 2022

Date Reported : Aug 31, 2022

Report Number: 2394536-1 C1

Page 1 of 1

Sample Description	Air Quality						
Location	วัดบางพลีใหญ่ (GPS 47P 0730822, 1407369)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2295424-1	2295424-2	2295424-3	2295424-4	2295424-5	2295424-6	2295424-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
11:00 AM - 12:00 PM	0.010	0.004	0.006	0.005	0.004	0.005	0.004
12:00 PM - 01:00 PM	0.011	0.004	0.006	0.006	0.004	0.006	0.004
01:00 PM - 02:00 PM	0.009	0.005	0.004	0.005	0.005	0.004	0.005
02:00 PM - 03:00 PM	0.005	0.005	0.004	0.005	0.008	0.004	0.004
03:00 PM - 04:00 PM	0.007	0.006	0.003	0.005	0.006	0.004	0.005
04:00 PM - 05:00 PM	0.009	0.006	0.006	0.009	0.007	0.006	0.005
05:00 PM - 06:00 PM	0.010	0.007	0.005	0.009	0.008	0.011	0.009
06:00 PM - 07:00 PM	0.007	0.006	0.004	0.010	0.006	0.012	0.005
07:00 PM - 08:00 PM	0.005	0.003	0.006	0.010	0.010	0.011	0.004
08:00 PM - 09:00 PM	0.003	0.003	0.010	0.010	0.011	0.011	0.004
09:00 PM - 10:00 PM	0.004	0.005	0.009	0.007	0.009	0.011	0.004
10:00 PM - 11:00 PM	0.006	0.003	0.004	0.006	0.008	0.010	0.005
11:00 PM - 12:00 AM	0.004	0.003	0.004	0.006	0.007	0.008	0.007
12:00 AM - 01:00 AM	0.004	0.003	0.003	0.004	0.006	0.008	0.003
01:00 AM - 02:00 AM	0.004	0.004	0.003	0.004	0.005	0.007	0.003
02:00 AM - 03:00 AM	0.005	0.004	0.004	0.003	0.005	0.008	0.003
03:00 AM - 04:00 AM	0.004	0.004	0.004	0.004	0.005	0.006	0.003
04:00 AM - 05:00 AM	0.005	0.004	0.004	0.006	0.006	0.005	0.004
05:00 AM - 06:00 AM	0.006	0.005	0.005	0.010	0.005	0.006	0.003
06:00 AM - 07:00 AM	0.007	0.005	0.006	0.009	0.006	0.007	0.003
07:00 AM - 08:00 AM	0.009	0.006	0.005	0.006	0.005	0.008	0.005
08:00 AM - 09:00 AM	0.005	0.006	0.005	0.005	0.005	0.006	0.006
09:00 AM - 10:00 AM	0.004	0.008	0.004	0.005	0.005	0.005	0.004
10:00 AM - 11:00 AM	0.005	0.007	0.004	0.003	0.005	0.004	0.004
Average	0.006	0.005	0.005	0.006	0.006	0.007	0.004
1hr - Maximum	0.011	0.008	0.010	0.010	0.011	0.012	0.009
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293011

Date Received : Aug 23, 2022

Date Reported : Aug 29, 2022

Report Number: 2388775-1

Page 1 of 1

Sample Description	Air Quality						
Location	วัดบางพลีใหญ่ (GPS 47P 729829, 1403305)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2293011-1	2293011-2	2293011-3	2293011-4	2293011-5	2293011-6	2293011-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
10:00 AM - 11:00 AM	0.007	0.003	0.007	0.008	0.004	0.002	0.002
11:00 AM - 12:00 PM	0.004	0.002	0.002	0.008	0.004	0.002	0.004
12:00 PM - 01:00 PM	0.001	0.001	0.002	0.007	0.004	0.009	0.004
01:00 PM - 02:00 PM	0.003	0.002	0.003	0.007	0.004	0.003	0.004
02:00 PM - 03:00 PM	0.003	0.002	0.004	0.009	0.003	0.002	0.002
03:00 PM - 04:00 PM	0.003	0.002	0.005	0.006	0.003	0.002	0.002
04:00 PM - 05:00 PM	0.006	0.004	0.006	0.006	0.002	0.002	0.007
05:00 PM - 06:00 PM	0.008	0.002	0.002	0.003	0.004	0.002	0.004
06:00 PM - 07:00 PM	0.009	0.003	0.002	0.004	0.003	0.003	0.003
07:00 PM - 08:00 PM	0.004	0.003	0.003	0.006	0.003	0.003	0.002
08:00 PM - 09:00 PM	0.006	0.003	0.004	0.007	0.004	0.003	0.007
09:00 PM - 10:00 PM	0.003	0.002	0.002	0.004	0.002	0.003	0.001
10:00 PM - 11:00 PM	0.004	0.006	0.002	0.004	0.003	0.003	0.002
11:00 PM - 12:00 AM	0.004	0.005	0.008	0.006	0.004	0.002	0.003
12:00 AM - 01:00 AM	0.004	0.003	0.005	0.004	0.005	0.001	0.004
01:00 AM - 02:00 AM	0.004	0.004	0.004	0.004	0.004	0.002	0.004
02:00 AM - 03:00 AM	0.010	0.004	0.006	0.004	0.003	0.004	0.004
03:00 AM - 04:00 AM	0.010	0.004	0.004	0.006	0.002	0.004	0.004
04:00 AM - 05:00 AM	0.007	0.004	0.006	0.004	0.002	0.003	0.003
05:00 AM - 06:00 AM	0.004	0.007	0.004	0.005	0.003	0.004	0.003
06:00 AM - 07:00 AM	0.004	0.004	0.003	0.003	0.002	0.004	0.003
07:00 AM - 08:00 AM	0.007	0.008	0.006	0.003	0.002	0.004	0.003
08:00 AM - 09:00 AM	0.006	0.003	0.006	0.006	0.004	0.004	0.006
09:00 AM - 10:00 AM	0.009	0.006	0.005	0.006	0.003	0.002	0.003
Average	0.005	0.004	0.004	0.005	0.003	0.003	0.004
1hr - Maximum	0.010	0.008	0.008	0.009	0.005	0.009	0.007
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).

Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :
Project Location : GHECO-ONE

Lot ID: 2293089

Date Received : Aug 23, 2022
Date Reported : Aug 29, 2022
Report Number: 2388827-1

Page 1 of 1

Sample Description	Air Quality						
Location	ถนนพหลโยธิน (GPS 47P 0729433, 1412978)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
Time	2293089-1 Aug 15, 2022	2293089-2 Aug 16, 2022	2293089-3 Aug 17, 2022	2293089-4 Aug 18, 2022	2293089-5 Aug 19, 2022	2293089-6 Aug 20, 2022	2293089-7 Aug 21, 2022
01:00 PM - 02:00 PM	0.001	0.007	0.002	0.003	0.002	0.005	0.001
02:00 PM - 03:00 PM	<0.001	0.004	0.002	0.004	0.005	0.005	0.003
03:00 PM - 04:00 PM	0.001	0.003	0.002	0.005	0.004	0.006	0.004
04:00 PM - 05:00 PM	0.001	0.002	0.002	0.003	0.002	0.005	0.006
05:00 PM - 06:00 PM	0.007	0.002	0.003	0.003	0.002	0.002	0.010
06:00 PM - 07:00 PM	0.007	0.003	0.002	0.002	0.002	0.001	0.010
07:00 PM - 08:00 PM	0.005	0.002	0.002	0.002	0.002	0.002	0.010
08:00 PM - 09:00 PM	0.016	0.002	0.002	0.002	0.003	0.002	0.010
09:00 PM - 10:00 PM	0.015	0.002	0.002	0.001	0.002	0.002	0.009
10:00 PM - 11:00 PM	<0.001	0.002	0.003	0.001	0.002	0.004	0.008
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.001	0.001	0.003	0.009
12:00 AM - 01:00 AM	0.002	0.002	0.002	<0.001	0.002	0.002	0.010
01:00 AM - 02:00 AM	0.002	0.002	0.001	0.001	0.001	0.002	0.007
02:00 AM - 03:00 AM	0.002	0.002	0.001	0.001	0.001	0.001	0.007
03:00 AM - 04:00 AM	0.003	0.001	0.001	0.001	0.001	0.001	0.010
04:00 AM - 05:00 AM	0.003	0.001	0.001	0.001	0.001	0.001	0.012
05:00 AM - 06:00 AM	0.008	0.003	0.005	0.013	0.019	0.010	0.013
06:00 AM - 07:00 AM	0.022	0.002	0.004	0.004	0.005	0.011	0.011
07:00 AM - 08:00 AM	0.026	0.003	0.016	0.021	0.012	0.016	<0.001
08:00 AM - 09:00 AM	0.013	0.004	0.014	0.011	0.015	0.004	0.001
09:00 AM - 10:00 AM	0.005	0.002	0.006	0.008	0.008	0.004	0.002
10:00 AM - 11:00 AM	0.006	0.002	0.005	0.006	0.006	0.003	0.002
11:00 AM - 12:00 PM	0.003	0.002	0.004	0.004	0.004	0.002	0.004
12:00 PM - 01:00 PM	0.004	0.002	0.005	0.004	0.004	0.001	0.003
Average	0.007	0.002	0.004	0.004	0.004	0.004	0.007
1hr - Maximum	0.026	0.007	0.016	0.021	0.019	0.016	0.013
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : US EPAMethod Part 50 App. F (Chemiluminescence)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :
Project Location : GHECO-ONE

Lot ID: 2293090

Date Received : Aug 23, 2022
Date Reported : Aug 29, 2022
Report Number: 2388825-1

Page 1 of 1

Sample Description	Air Quality						
Location	ถนนพหลโยธิน (GPS 47P 0725073, 1412550)						
Parameter	Nitrogen dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
Time	2293090-1 Aug 15, 2022	2293090-2 Aug 16, 2022	2293090-3 Aug 17, 2022	2293090-4 Aug 18, 2022	2293090-5 Aug 19, 2022	2293090-6 Aug 20, 2022	2293090-7 Aug 21, 2022
12:00 PM - 01:00 PM	0.008	0.008	0.006	0.012	0.014	0.010	0.005
01:00 PM - 02:00 PM	0.006	0.007	0.006	0.006	0.010	0.010	0.006
02:00 PM - 03:00 PM	0.004	0.008	0.007	0.005	0.005	0.011	0.006
03:00 PM - 04:00 PM	0.006	0.009	0.010	0.005	0.009	0.009	0.008
04:00 PM - 05:00 PM	0.005	0.009	0.009	0.006	0.006	0.007	0.006
05:00 PM - 06:00 PM	0.004	0.009	0.010	0.006	0.006	0.008	0.007
06:00 PM - 07:00 PM	0.006	0.008	0.011	0.005	0.006	0.008	0.010
07:00 PM - 08:00 PM	0.005	0.008	0.010	0.005	0.004	0.012	0.009
08:00 PM - 09:00 PM	0.006	0.011	0.009	0.005	0.005	0.008	0.008
09:00 PM - 10:00 PM	0.007	0.011	0.007	0.006	0.006	0.007	0.008
10:00 PM - 11:00 PM	0.008	0.015	0.025	0.008	0.006	0.008	0.002
11:00 PM - 12:00 AM	0.007	0.022	0.025	0.011	0.006	0.008	0.005
12:00 AM - 01:00 AM	0.004	0.010	0.015	0.009	0.006	0.007	0.008
01:00 AM - 02:00 AM	0.004	0.010	0.009	0.013	0.007	0.004	0.012
02:00 AM - 03:00 AM	0.004	0.006	0.008	0.021	0.005	0.005	0.013
03:00 AM - 04:00 AM	0.005	0.008	0.007	0.020	0.005	0.006	0.010
04:00 AM - 05:00 AM	0.004	0.009	0.006	0.009	0.009	0.004	0.008
05:00 AM - 06:00 AM	0.006	0.008	0.006	0.007	0.014	0.003	0.008
06:00 AM - 07:00 AM	0.003	0.005	0.008	0.007	0.010	0.003	0.006
07:00 AM - 08:00 AM	0.003	0.005	0.008	0.005	0.008	0.003	0.006
08:00 AM - 09:00 AM	0.003	0.005	0.012	0.004	0.007	0.003	0.006
09:00 AM - 10:00 AM	0.004	0.007	0.012	0.007	0.008	0.005	0.006
10:00 AM - 11:00 AM	0.005	0.008	0.013	0.014	0.013	0.006	0.004
11:00 AM - 12:00 PM	0.006	0.008	0.013	0.013	0.011	0.006	0.007
Average	0.005	0.009	0.011	0.009	0.008	0.007	0.007
1hr - Maximum	0.008	0.022	0.025	0.021	0.014	0.012	0.013
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

Standard : Notification of the National Environment Board No. 33, 2009 (B.E. 2552).
Reference Method : US EPAMethod Part 50 App. F (Chemiluminescence)

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Saranya Chalermthamrong
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19517-21/ EMAIL

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19517-21/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2295406

Date Received : Aug 23, 2022

Date Reported : Aug 31, 2022

Report Number: 2394530-1 C1

Page 1 of 1

Sample Description	Air Quality						
Location	โรงงานผลิตและส่งออกพลาสติก (GPS 47P 073185, 1405871)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2295406-1	2295406-2	2295406-3	2295406-4	2295406-5	2295406-6	2295406-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
09:00 AM - 10:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.002	0.003	0.002	0.004	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.002	0.002	0.002	0.004	0.003	0.002	0.002
12:00 PM - 01:00 PM	0.001	0.002	0.003	0.004	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.001	0.002	0.003	0.004	0.001	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.004	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.003	0.004	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.002	0.001	0.003	0.004	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.003	0.003	0.005	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.001	0.003	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.003	0.003	0.002	0.002	0.003	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.003	0.003	0.002	0.003	0.002
09:00 PM - 10:00 PM	0.001	0.002	0.003	0.002	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.003	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.002	0.001	0.002	0.003	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.002	0.002	0.001	0.003	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.002	0.002	0.003	0.003	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.002	0.002	0.002	0.003	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.002	0.002	0.002	0.003	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.001	0.002	0.002	0.002	0.002	0.003	0.002
08:00 AM - 09:00 AM	0.001	0.003	0.002	0.002	0.002	0.003	0.002
Average	0.002	0.002	0.002	0.003	0.002	0.002	0.002
1hr - Maximum	0.002	0.003	0.003	0.005	0.003	0.003	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	US EPA Method Part 53 and 58						

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293094

Date Received : Aug 23, 2022

Date Reported : Aug 29, 2022

Report Number: 2388829-1

Page 1 of 1

Sample Description	Air Quality						
Location	โรงงานผลิตพลาสติก (GPS 47P 0731529, 1402602)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2293094-1	2293094-2	2293094-3	2293094-4	2293094-5	2293094-6	2293094-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
09:00 AM - 10:00 AM	0.003	0.005	0.004	0.004	0.004	0.004	0.004
10:00 AM - 11:00 AM	0.004	0.005	0.004	0.004	0.004	0.004	0.004
11:00 AM - 12:00 PM	0.003	0.005	0.004	0.004	0.004	0.004	0.004
12:00 PM - 01:00 PM	0.003	0.005	0.002	0.003	0.003	0.004	0.006
01:00 PM - 02:00 PM	0.003	0.005	0.003	0.002	0.003	0.004	0.006
02:00 PM - 03:00 PM	0.002	0.002	0.004	0.003	0.003	0.004	0.004
03:00 PM - 04:00 PM	0.002	0.002	0.005	0.004	0.005	0.004	0.003
04:00 PM - 05:00 PM	0.002	0.003	0.005	0.005	0.005	0.004	0.001
05:00 PM - 06:00 PM	0.002	0.005	0.005	0.004	0.005	0.004	0.004
06:00 PM - 07:00 PM	0.005	0.005	0.005	0.005	0.004	0.004	0.004
07:00 PM - 08:00 PM	0.006	0.005	0.005	0.004	0.004	0.004	0.004
08:00 PM - 09:00 PM	0.004	0.005	0.005	0.005	0.004	0.004	0.004
09:00 PM - 10:00 PM	0.004	0.005	0.004	0.005	0.004	0.004	0.004
10:00 PM - 11:00 PM	0.004	0.005	0.005	0.005	0.004	0.004	0.004
11:00 PM - 12:00 AM	0.004	0.005	0.005	0.004	0.004	0.004	0.004
12:00 AM - 01:00 AM	0.004	0.005	0.005	0.004	0.004	0.004	0.003
01:00 AM - 02:00 AM	0.004	0.005	0.005	0.004	0.004	0.004	0.003
02:00 AM - 03:00 AM	0.006	0.005	0.004	0.004	0.004	0.003	0.004
03:00 AM - 04:00 AM	0.005	0.003	0.004	0.005	0.004	0.004	0.003
04:00 AM - 05:00 AM	0.005	0.003	0.004	0.004	0.004	0.003	0.004
05:00 AM - 06:00 AM	0.003	0.003	0.004	0.004	0.004	0.004	0.004
06:00 AM - 07:00 AM	0.003	0.004	0.004	0.004	0.004	0.004	0.004
07:00 AM - 08:00 AM	0.004	0.005	0.004	0.004	0.004	0.004	0.004
08:00 AM - 09:00 AM	0.004	0.005	0.004	0.004	0.004	0.004	0.004
Average	0.004	0.004	0.004	0.004	0.004	0.004	0.004
1hr - Maximum	0.006	0.005	0.005	0.005	0.005	0.004	0.006
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	US EPA Method Part 53 and 58						

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2292985

Date Received : Aug 23, 2022

Date Reported : Aug 29, 2022

Report Number: 2388706-1

Page 1 of 1

Sample Description	Air Quality						
Location	โรงงานอุตสาหกรรม (GPS 47P 0736058, 1402077)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2292985-1	2292985-2	2292985-3	2292985-4	2292985-5	2292985-6	2292985-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
11:00 AM - 12:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
12:00 PM - 01:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
03:00 PM - 04:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
04:00 PM - 05:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
09:00 PM - 10:00 PM	0.002	0.003	0.004	0.002	0.002	0.002	0.003
10:00 PM - 11:00 PM	0.002	0.003	0.002	0.002	0.002	0.002	0.003
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.002	0.003	0.002	0.003
12:00 AM - 01:00 AM	0.002	0.003	0.003	0.002	0.003	0.003	0.003
01:00 AM - 02:00 AM	0.003	0.003	0.003	0.003	0.003	0.002	0.003
02:00 AM - 03:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
03:00 AM - 04:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
04:00 AM - 05:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.004
05:00 AM - 06:00 AM	0.004	0.003	0.003	0.003	0.003	0.003	0.003
06:00 AM - 07:00 AM	0.003	0.002	0.003	0.003	0.003	0.003	0.003
07:00 AM - 08:00 AM	0.003	0.002	0.002	0.003	0.003	0.006	0.004
08:00 AM - 09:00 AM	0.003	0.002	0.002	0.002	0.003	0.003	0.003
09:00 AM - 10:00 AM	0.002	0.002	0.002	0.002	0.002	0.003	0.004
10:00 AM - 11:00 AM	0.003	0.003	0.002	0.002	0.002	0.003	0.004
Average	0.002	0.002	0.002	0.002	0.002	0.003	0.003
1hr - Maximum	0.004	0.003	0.004	0.003	0.003	0.006	0.004
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	: US EPA Method Part 53 and 58						

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S:\Reports_Air SOxNOx.rpt (1:11PM)

19517-21/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2295432

Date Received : Aug 23, 2022

Date Reported : Aug 31, 2022

Report Number: 2394542-1 C1

Page 1 of 1

Sample Description	Air Quality						
Location	โรงงานอุตสาหกรรม (GPS 47P 0730822, 1407369)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2295432-1	2295432-2	2295432-3	2295432-4	2295432-5	2295432-6	2295432-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
11:00 AM - 12:00 PM	0.002	0.003	0.003	0.004	0.003	0.003	0.003
12:00 PM - 01:00 PM	0.003	0.003	0.004	0.003	0.003	0.003	0.003
01:00 PM - 02:00 PM	0.003	0.003	0.004	0.004	0.004	0.004	0.003
02:00 PM - 03:00 PM	0.003	0.003	0.004	0.003	0.003	0.004	0.003
03:00 PM - 04:00 PM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
04:00 PM - 05:00 PM	0.003	0.003	0.003	0.003	0.005	0.004	0.003
05:00 PM - 06:00 PM	0.003	0.003	0.003	0.003	0.006	0.004	0.004
06:00 PM - 07:00 PM	0.003	0.003	0.003	0.003	0.003	0.004	0.003
07:00 PM - 08:00 PM	0.003	0.004	0.003	0.003	0.003	0.004	0.003
08:00 PM - 09:00 PM	0.003	0.004	0.003	0.003	0.004	0.004	0.004
09:00 PM - 10:00 PM	0.003	0.004	0.003	0.003	0.004	0.004	0.003
10:00 PM - 11:00 PM	0.003	0.004	0.003	0.003	0.004	0.004	0.003
11:00 PM - 12:00 AM	0.003	0.003	0.004	0.003	0.003	0.003	0.004
12:00 AM - 01:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
01:00 AM - 02:00 AM	0.003	0.003	0.003	0.003	0.003	0.004	0.003
02:00 AM - 03:00 AM	0.003	0.003	0.003	0.003	0.003	0.004	0.003
03:00 AM - 04:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
04:00 AM - 05:00 AM	0.003	0.003	0.003	0.003	0.003	0.003	0.003
05:00 AM - 06:00 AM	0.003	0.003	0.004	0.003	0.003	0.003	0.003
06:00 AM - 07:00 AM	0.003	0.003	0.004	0.003	0.003	0.003	0.003
07:00 AM - 08:00 AM	0.003	0.003	0.004	0.003	0.003	0.003	0.003
08:00 AM - 09:00 AM	0.003	0.003	0.004	0.003	0.003	0.003	0.003
09:00 AM - 10:00 AM	0.003	0.003	0.004	0.003	0.004	0.003	0.003
10:00 AM - 11:00 AM	0.003	0.003	0.004	0.003	0.004	0.003	0.003
Average	0.003	0.003	0.003	0.003	0.003	0.003	0.003
1hr - Maximum	0.003	0.004	0.004	0.004	0.006	0.004	0.004
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	: US EPA Method Part 53 and 58						

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293014
Date Received : Aug 23, 2022
Date Reported : Aug 29, 2022
Report Number: 2388771-1

Page 1 of 1

Sample Description	Air Quality						
Location	ชุมชนหนองบัว (GPS 47P 729829, 1403305)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2293014-1	2293014-2	2293014-3	2293014-4	2293014-5	2293014-6	2293014-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
10:00 AM - 11:00 AM	0.002	0.005	0.004	0.004	0.004	0.004	0.004
11:00 AM - 12:00 PM	0.002	0.004	0.004	0.004	0.004	0.004	0.004
12:00 PM - 01:00 PM	0.003	0.004	0.004	0.004	0.004	0.004	0.004
01:00 PM - 02:00 PM	0.004	0.004	0.004	0.004	0.004	0.004	0.006
02:00 PM - 03:00 PM	0.002	0.005	0.004	0.004	0.004	0.004	0.006
03:00 PM - 04:00 PM	0.002	0.004	0.004	0.004	0.004	0.004	0.004
04:00 PM - 05:00 PM	0.001	0.004	0.004	0.004	0.004	0.004	0.003
05:00 PM - 06:00 PM	0.001	0.004	0.004	0.004	0.004	0.004	0.004
06:00 PM - 07:00 PM	0.002	0.004	0.004	0.004	0.004	0.004	0.003
07:00 PM - 08:00 PM	0.005	0.005	0.004	0.004	0.004	0.004	0.004
08:00 PM - 09:00 PM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
09:00 PM - 10:00 PM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
10:00 PM - 11:00 PM	0.005	0.004	0.004	0.006	0.004	0.004	0.004
11:00 PM - 12:00 AM	0.005	0.004	0.004	0.005	0.004	0.004	0.004
12:00 AM - 01:00 AM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
01:00 AM - 02:00 AM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
02:00 AM - 03:00 AM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
03:00 AM - 04:00 AM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
04:00 AM - 05:00 AM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
05:00 AM - 06:00 AM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
06:00 AM - 07:00 AM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
07:00 AM - 08:00 AM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
08:00 AM - 09:00 AM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
09:00 AM - 10:00 AM	0.005	0.004	0.004	0.004	0.004	0.004	0.004
Average	0.004	0.004	0.004	0.004	0.004	0.004	0.004
1hr - Maximum	0.005	0.005	0.004	0.006	0.004	0.004	0.006
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	US EPA Method Part 53 and 58						

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15517-21/EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293092
Date Received : Aug 23, 2022
Date Reported : Aug 29, 2022
Report Number: 2388831-1

Page 1 of 1

Sample Description	Air Quality						
Location	ชุมชนหนองบัว (GPS 47P 0729433, 1412978)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Wilars						
	2293092-1	2293092-2	2293092-3	2293092-4	2293092-5	2293092-6	2293092-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
01:00 PM - 02:00 PM	0.003	0.005	0.005	0.005	0.005	0.005	0.005
02:00 PM - 03:00 PM	0.004	0.005	0.005	0.005	0.005	0.005	0.005
03:00 PM - 04:00 PM	0.004	0.005	0.005	0.005	0.005	0.005	0.005
04:00 PM - 05:00 PM	0.004	0.005	0.005	0.005	0.005	0.005	0.005
05:00 PM - 06:00 PM	0.005	0.005	0.005	0.005	0.005	0.005	0.005
06:00 PM - 07:00 PM	0.005	0.005	0.005	0.005	0.005	0.005	0.005
07:00 PM - 08:00 PM	0.005	0.005	0.005	0.005	0.005	0.005	0.005
08:00 PM - 09:00 PM	0.005	0.005	0.005	0.005	0.005	0.006	0.005
09:00 PM - 10:00 PM	0.004	0.005	0.005	0.005	0.005	0.005	0.005
10:00 PM - 11:00 PM	0.003	0.005	0.005	0.005	0.005	0.005	0.005
11:00 PM - 12:00 AM	0.005	0.005	0.005	0.005	0.005	0.006	0.005
12:00 AM - 01:00 AM	0.005	0.005	0.005	0.005	0.005	0.006	0.005
01:00 AM - 02:00 AM	0.005	0.005	0.005	0.005	0.005	0.005	0.005
02:00 AM - 03:00 AM	0.005	0.005	0.005	0.005	0.005	0.005	0.005
03:00 AM - 04:00 AM	0.005	0.005	0.004	0.005	0.005	0.005	0.005
04:00 AM - 05:00 AM	0.005	0.005	0.005	0.005	0.004	0.005	0.004
05:00 AM - 06:00 AM	0.005	0.005	0.005	0.004	0.004	0.005	0.005
06:00 AM - 07:00 AM	0.005	0.004	0.005	0.004	0.004	0.005	0.004
07:00 AM - 08:00 AM	0.005	0.004	0.006	0.004	0.005	0.005	0.004
08:00 AM - 09:00 AM	0.004	0.004	0.005	0.004	0.005	0.005	0.004
09:00 AM - 10:00 AM	0.005	0.005	0.005	0.005	0.005	0.006	0.004
10:00 AM - 11:00 AM	0.005	0.005	0.005	0.005	0.005	0.005	0.005
11:00 AM - 12:00 PM	0.005	0.005	0.005	0.005	0.005	0.005	0.005
12:00 PM - 01:00 PM	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Average	0.005	0.005	0.005	0.005	0.005	0.005	0.005
1hr - Maximum	0.005	0.005	0.006	0.005	0.005	0.006	0.005
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	US EPA Method Part 53 and 58						

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293093
Date Received : Aug 23, 2022
Date Reported : Aug 29, 2022
Report Number: 2388830-1

Page 1 of 1

Sample Description	Air Quality						
Location	หมู่ที่ ๖ ตำบลบ้านใหม่ (GPS 47P 0725073, 1412550)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Aug 15, 2022 - Aug 22, 2022						
Measurement by	Apichart Willars						
	2293093-1	2293093-2	2293093-3	2293093-4	2293093-5	2293093-6	2293093-7
Time	Aug 15, 2022	Aug 16, 2022	Aug 17, 2022	Aug 18, 2022	Aug 19, 2022	Aug 20, 2022	Aug 21, 2022
12:00 PM - 01:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
09:00 PM - 10:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
08:00 AM - 09:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.002	0.002	0.002	0.001	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Average	0.002	0.002	0.002	0.002	0.002	0.002	0.002
1hr - Maximum	0.002	0.002	0.002	0.002	0.002	0.002	0.003
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	: US EPA Method Part 53 and 58						

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Approved by

Saranya C.

Saranya Chalermthamrong
Scientist (4)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2295408
Date Received : Aug 23, 2022
Date Reported : Aug 31, 2022
Report Number : 2394521-1 C1

Page 1 of 2

Sample Number : 2295408-1 to 7
Parameter : Wind Speed / Wind Direction
Location : โรงพ่นกรดสังเคราะห์ด้านนอกอาคาร (GPS 47P 0735185, 1405871)
Sampling Date : Aug 15 - Aug 22, 2022
Sampling by : Apichart Wilars

Time	Aug 15 - Aug 16, 2022			Aug 16 - Aug 17, 2022			Aug 17 - Aug 18, 2022			Aug 18 - Aug 19, 2022			Aug 19 - Aug 20, 2022			Aug 20 - Aug 21, 2022			Aug 21 - Aug 22, 2022		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
09:00 AM - 10:00 AM	1.2	274.0	W	0.9	208.0	SSW	1.1	216.0	SW	1.3	220.0	SW	1.9	179.0	S	2.2	226.0	SW	0.4	171.0	S
10:00 AM - 11:00 AM	1.8	197.0	SSW	0.5	188.0	S	1.5	264.0	W	1.3	234.0	SW	1.3	285.0	WNW	2.3	162.0	SSE	1.2	258.0	WSW
11:00 AM - 12:00 PM	0.4	240.0	WSW	0.3	203.0	SSW	0.4	261.0	W	1.9	214.0	SW	1.3	165.0	SSE	0.7	205.0	SSW	0.5	285.0	WNW
12:00 PM - 01:00 PM	0.9	275.0	W	0.4	197.0	SSW	0.3	188.0	S	1.7	227.0	SW	0.8	186.0	S	2.3	279.0	W	2.2	321.0	NW
01:00 PM - 02:00 PM	1.1	197.0	SSW	0.4	209.0	SSW	0.6	255.0	WSW	1.3	261.0	W	1.8	192.0	SSW	2.1	164.0	SSE	1.9	311.0	NW
02:00 PM - 03:00 PM	0.7	218.0	SW	0.4	217.0	SW	0.4	250.0	WSW	0.7	209.0	SSW	2.5	168.0	SSE	1.2	159.0	SSE	2.1	215.0	SW
03:00 PM - 04:00 PM	1.0	175.0	S	0.6	207.0	SSW	1.4	237.0	WSW	1.1	217.0	SW	2.4	187.0	S	0.8	186.0	S	1.0	211.0	SSW
04:00 PM - 05:00 PM	1.2	138.0	SE	1.4	217.0	SW	0.4	233.0	SW	2.1	187.0	S	2.6	153.0	SSE	0.4	153.0	SSE	0.6	227.0	SW
05:00 PM - 06:00 PM	1.0	210.0	SSW	0.6	211.0	SSW	0.4	230.0	SW	1.1	204.0	SSW	0.4	213.0	SSW	0.9	129.0	SE	1.0	220.0	SW
06:00 PM - 07:00 PM	0.8	297.0	WNW	0.5	227.0	SW	0.3	267.0	W	1.0	231.0	SW	0.4	208.0	SSW	0.6	136.0	SE	1.2	211.0	SSW
07:00 PM - 08:00 PM	0.4	330.0	NNW	0.4	220.0	SW	0.8	304.0	NW	1.6	186.0	S	0.6	251.0	WSW	2.0	132.0	SE	0.4	266.0	W
08:00 PM - 09:00 PM	0.6	330.0	NNW	0.6	211.0	SSW	0.8	228.0	SW	0.4	202.0	SSW	0.4	343.0	NNW	0.9	136.0	SE	1.4	315.0	NW
09:00 PM - 10:00 PM	0.4	344.0	NNW	0.4	266.0	W	2.7	259.0	W	1.9	245.0	WSW	0.4	266.0	W	0.5	159.0	SSE	1.3	223.0	SW
10:00 PM - 11:00 PM	0.4	336.0	NNW	0.4	315.0	NW	2.2	251.0	WSW	1.3	209.0	SSW	0.3	317.0	NW	0.3	280.0	W	1.8	205.0	SSW
11:00 PM - 12:00 AM	0.6	327.0	NNW	0.5	223.0	SW	0.4	262.0	W	2.1	259.0	W	0.4	334.0	NNW	0.6	172.0	S	0.4	209.0	SSW
12:00 AM - 01:00 AM	0.4	334.0	NNW	0.5	205.0	SSW	0.3	214.0	SW	0.4	255.0	WSW	0.3	356.0	N	0.5	201.0	SSW	1.3	208.0	SSW
01:00 AM - 02:00 AM	0.4	335.0	NNW	0.6	209.0	SSW	0.5	274.0	W	0.5	205.0	SSW	1.5	220.0	SW	0.4	253.0	WSW	1.2	251.0	WSW
02:00 AM - 03:00 AM	0.8	319.0	NW	0.4	228.0	SW	0.5	299.0	WNW	0.6	263.0	W	1.8	311.0	NW	0.6	166.0	SSE	2.6	343.0	NNW
03:00 AM - 04:00 AM	1.0	323.0	NW	0.5	211.0	SSW	0.8	239.0	WSW	0.6	311.0	NW	0.6	188.0	S	0.4	272.0	W	1.2	266.0	W
04:00 AM - 05:00 AM	0.6	324.0	NW	0.8	222.0	SW	0.6	280.0	W	0.8	329.0	NNW	0.8	188.0	S	0.5	262.0	W	0.3	317.0	NW
05:00 AM - 06:00 AM	0.6	355.0	N	0.8	212.0	SSW	0.6	291.0	WNW	0.8	212.0	SSW	0.8	182.0	S	0.5	169.0	S	0.4	334.0	NNW
06:00 AM - 07:00 AM	0.4	169.0	S	1.0	256.0	WSW	0.4	276.0	W	1.2	214.0	SW	1.3	177.0	S	0.6	170.0	S	0.5	356.0	N
07:00 AM - 08:00 AM	1.5	254.0	WSW	1.2	216.0	SW	0.8	195.0	SSW	2.1	199.0	SSW	2.4	171.0	S	0.5	148.0	SSE	1.1	220.0	SW
08:00 AM - 09:00 AM	0.5	219.0	SW	1.4	248.0	WSW	1.2	262.0	W	0.6	175.0	S	1.4	170.0	S	1.7	141.0	SE	1.5	221.0	SW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayu Jittrant

Sarayuth Jittrantont
Assistant General Manager

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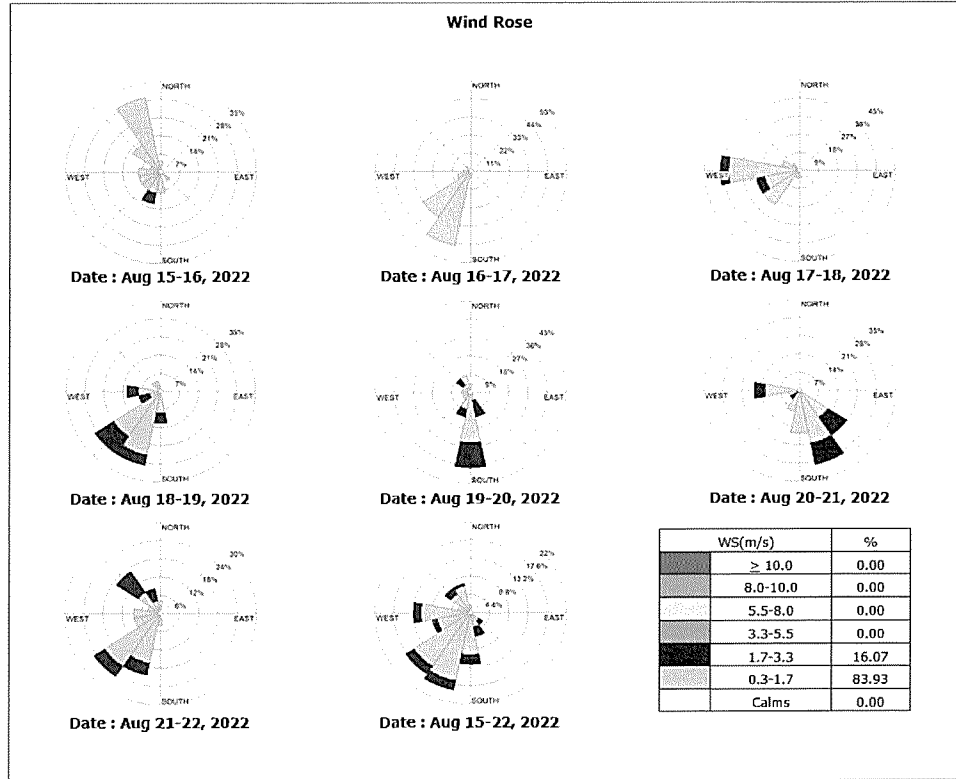


Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2295408
Date Received : Aug 23, 2022
Date Reported : Aug 31, 2022
Report Number : 2394521-1 C1

Page 2 of 2



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2293097
Date Received : Aug 23, 2022
Date Reported : Aug 30, 2022
Report Number : 2388832-1

Page 1 of 2

Sample Number	2293097-1 to 7																				
Parameter	Wind Speed / Wind Direction																				
Location	สนง.นิคมอุตสาหกรรมฯ (GPS 47P 0731529, 1402602)																				
Sampling Date	Aug 15 - Aug 22, 2022																				
Sampling by	Apichart Wilars																				
Time	Aug 15 - Aug 16, 2022			Aug 16 - Aug 17, 2022			Aug 17 - Aug 18, 2022			Aug 18 - Aug 19, 2022			Aug 19 - Aug 20, 2022			Aug 20 - Aug 21, 2022			Aug 21 - Aug 22, 2022		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
01:00 PM - 02:00 PM	1.1	180.0	S	1.6	168.0	SSE	1.4	185.0	S	2.5	189.0	S	2.3	185.0	S	1.9	186.0	S	2.4	180.0	S
02:00 PM - 03:00 PM	1.6	199.0	SSW	2.0	170.0	S	1.6	185.0	S	2.9	199.0	SSW	1.4	196.0	SSW	1.2	187.0	S	3.1	185.0	S
03:00 PM - 04:00 PM	1.1	185.0	S	1.5	175.0	S	2.5	199.0	SSW	1.6	198.0	SSW	1.5	178.0	S	0.7	199.0	SSW	3.5	183.0	S
04:00 PM - 05:00 PM	0.6	198.0	SSW	2.9	176.0	S	1.6	198.0	SSW	2.8	185.0	S	3.3	199.0	SSW	2.0	198.0	SSW	1.6	178.0	S
05:00 PM - 06:00 PM	1.7	180.0	S	1.1	198.0	SSW	2.5	200.0	SSW	2.3	198.0	SSW	1.4	195.0	SSW	2.2	199.0	SSW	3.4	230.0	SW
06:00 PM - 07:00 PM	1.2	133.0	SE	1.2	187.0	S	3.5	266.0	W	3.3	268.0	W	1.5	45.0	NE	3.3	187.0	S	2.2	235.0	SW
07:00 PM - 08:00 PM	2.6	274.0	W	0.8	300.0	WNW	3.0	213.0	SSW	1.3	145.0	SE	2.3	46.0	NE	2.1	189.0	S	2.7	10.0	N
08:00 PM - 09:00 PM	3.0	312.0	NW	0.9	250.0	WSW	2.5	25.0	NNE	3.3	45.0	NE	2.6	46.0	NE	2.9	15.0	NNE	3.9	12.0	NNE
09:00 PM - 10:00 PM	1.0	313.0	NW	1.5	307.0	NW	1.0	26.0	NNE	2.7	46.0	NE	2.5	49.0	NE	2.1	16.0	NNE	3.8	10.0	N
10:00 PM - 11:00 PM	0.7	70.0	ENE	1.4	286.0	WNW	0.6	27.0	NNE	3.1	20.0	NNE	1.4	12.0	NNE	1.5	45.0	NE	3.2	5.0	N
11:00 PM - 12:00 AM	1.5	69.0	ENE	1.9	308.0	NW	3.5	30.0	NNE	1.2	23.0	NNE	1.5	10.0	N	2.3	46.0	NE	2.1	13.0	NNE
12:00 AM - 01:00 AM	1.3	77.0	ENE	0.6	309.0	NW	1.6	35.0	NE	2.5	25.0	NNE	1.3	12.0	NNE	0.9	45.0	NE	0.6	15.0	NNE
01:00 AM - 02:00 AM	0.9	80.0	E	0.5	288.0	WNW	1.2	36.0	NE	3.7	15.0	NNE	1.4	13.0	NNE	1.1	23.0	NNE	1.3	16.0	NNE
02:00 AM - 03:00 AM	0.6	79.0	E	1.1	20.0	NNE	1.6	45.0	NE	2.4	10.0	N	1.5	45.0	NE	1.4	25.0	NNE	1.4	45.0	NE
03:00 AM - 04:00 AM	1.5	45.0	NE	1.0	50.0	NE	1.6	46.0	NE	0.5	14.0	NNE	0.8	46.0	NE	2.4	26.0	NNE	1.5	45.0	NE
04:00 AM - 05:00 AM	1.5	46.0	NE	2.0	51.0	NE	1.7	317.0	NW	0.7	12.0	NNE	1.6	42.0	NE	1.1	10.0	N	0.3	46.0	NE
05:00 AM - 06:00 AM	1.6	45.0	NE	1.3	53.0	NE	2.3	312.0	NW	1.3	10.0	N	0.8	10.0	N	1.3	12.0	NNE	1.6	45.0	NE
06:00 AM - 07:00 AM	2.4	55.0	NE	3.5	54.0	NE	1.6	312.0	NW	1.5	46.0	NE	1.3	10.0	N	0.7	45.0	NE	1.5	135.0	SE
07:00 AM - 08:00 AM	1.5	50.0	NE	2.4	301.0	WNW	1.5	311.0	NW	1.6	48.0	NE	0.6	90.0	E	2.1	49.0	NE	1.5	136.0	SE
08:00 AM - 09:00 AM	1.3	51.0	NE	2.4	225.0	SW	0.7	280.0	W	1.4	50.0	NE	0.6	130.0	SE	1.4	90.0	E	1.5	195.0	SSW
09:00 AM - 10:00 AM	0.5	130.0	SE	1.6	172.0	S	0.9	228.0	SW	1.1	199.0	SSW	1.0	160.0	SSE	2.8	95.0	E	1.8	200.0	SSW
10:00 AM - 11:00 AM	1.9	135.0	SE	2.5	268.0	W	2.1	280.0	W	1.4	260.0	W	1.1	170.0	S	2.5	130.0	SE	0.9	185.0	S
11:00 AM - 12:00 PM	2.6	145.0	SE	1.6	180.0	S	3.4	189.0	S	2.3	180.0	S	0.9	178.0	S	3.4	165.0	SSE	0.8	178.0	S
12:00 PM - 01:00 PM	1.5	160.0	SSE	2.3	189.0	S	1.6	187.0	S	3.3	186.0	S	1.0	178.0	S	1.6	170.0	S	0.7	185.0	S

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jitranont
Assistant General Manager

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Approved by

Sarayuth Jitranont
Assistant General Manager

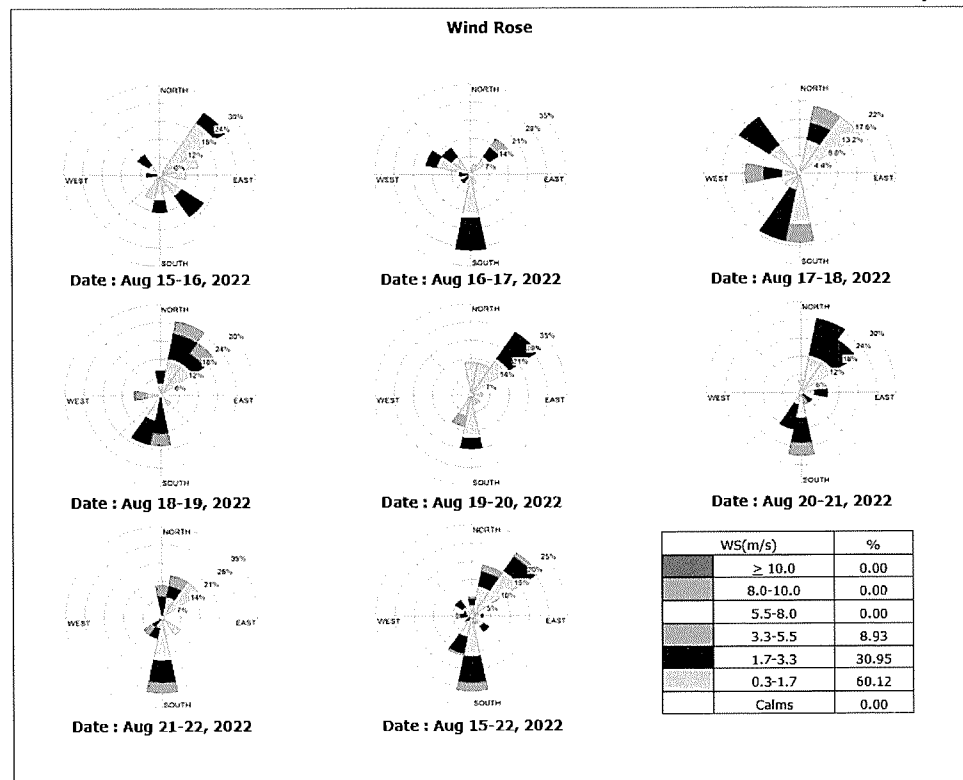


Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2293097
Date Received : Aug 23, 2022
Date Reported : Aug 30, 2022
Report Number : 2388832-1

Page 2 of 2



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2292987
Date Received : Aug 23, 2022
Date Reported : Aug 30, 2022
Report Number : 2388689-1

Page 1 of 2

Sample Number : 2292987-1 to 7
Parameter : Wind Speed / Wind Direction
Location : กรุงเทพมหานคร (GPS 47P 0736058, 1402077)
Sampling Date : Aug 15 - Aug 22, 2022
Sampling by : Apichart Wilars

Time	Aug 15 - Aug 16, 2022			Aug 16 - Aug 17, 2022			Aug 17 - Aug 18, 2022			Aug 18 - Aug 19, 2022			Aug 19 - Aug 20, 2022			Aug 20 - Aug 21, 2022			Aug 21 - Aug 22, 2022		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
11:00 AM - 12:00 PM	0.3	104.0	ESE	1.1	105.0	ESE	1.2	98.0	E	0.6	99.0	E	1.2	103.0	ESE	0.5	309.0	NW	0.4	132.0	SE
12:00 PM - 01:00 PM	0.4	110.0	ESE	0.2	-	-	1.3	322.0	NW	1.1	92.0	E	2.4	103.0	ESE	0.0	-	-	1.0	109.0	ESE
01:00 PM - 02:00 PM	1.4	109.0	ESE	0.5	110.0	ESE	1.0	101.0	E	0.0	-	-	1.4	107.0	ESE	0.3	139.0	SE	0.6	129.0	SE
02:00 PM - 03:00 PM	0.6	101.0	E	0.0	-	-	0.0	-	-	0.0	-	-	1.6	84.0	E	0.9	122.0	ESE	0.6	122.0	ESE
03:00 PM - 04:00 PM	0.9	120.0	ESE	0.8	109.0	ESE	0.6	96.0	E	0.7	100.0	E	0.4	108.0	ESE	1.5	110.0	ESE	0.0	-	-
04:00 PM - 05:00 PM	0.4	95.0	E	0.4	47.0	NE	0.3	83.0	E	0.0	-	-	0.0	-	-	0.0	-	-	0.9	121.0	ESE
05:00 PM - 06:00 PM	0.7	63.0	ENE	0.6	43.0	NE	0.0	-	-	0.0	-	-	0.0	-	-	0.6	90.0	E	1.1	328.0	NNW
06:00 PM - 07:00 PM	0.6	74.0	ENE	0.6	80.0	E	0.0	-	-	1.1	14.0	NNE	0.4	137.0	SE	0.0	-	-	1.0	139.0	SE
07:00 PM - 08:00 PM	0.4	99.0	E	0.0	-	-	0.3	110.0	ESE	0.0	-	-	0.5	111.0	ESE	1.3	43.0	NE	0.2	-	-
08:00 PM - 09:00 PM	0.4	196.0	SSW	1.0	99.0	E	0.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.4	121.0	ESE
09:00 PM - 10:00 PM	0.3	301.0	WNW	0.5	104.0	ESE	1.9	94.0	E	0.8	101.0	E	0.0	-	-	0.7	123.0	ESE	1.3	108.0	ESE
10:00 PM - 11:00 PM	0.6	226.0	SW	0.3	60.0	ENE	0.7	103.0	ESE	0.6	90.0	E	0.6	124.0	SE	2.4	127.0	SE	0.5	134.0	SE
11:00 PM - 12:00 AM	0.3	222.0	SW	1.2	97.0	E	0.5	103.0	ESE	1.0	105.0	ESE	0.8	90.0	E	0.1	-	-	0.5	175.0	S
12:00 AM - 01:00 AM	0.2	-	-	1.7	103.0	ESE	0.4	88.0	E	0.0	-	-	1.2	121.0	ESE	0.5	129.0	SE	0.4	138.0	SE
01:00 AM - 02:00 AM	0.1	-	-	0.3	107.0	ESE	1.6	107.0	ESE	0.3	84.0	E	0.4	116.0	ESE	1.4	90.0	E	0.6	134.0	SE
02:00 AM - 03:00 AM	0.0	-	-	0.8	108.0	ESE	1.0	83.0	E	0.2	-	-	0.4	143.0	SE	0.4	112.0	ESE	0.3	126.0	SE
03:00 AM - 04:00 AM	0.7	217.0	SW	1.7	127.0	SE	0.0	-	-	0.0	-	-	1.6	138.0	SE	1.0	122.0	ESE	0.4	127.0	SE
04:00 AM - 05:00 AM	0.5	222.0	SW	0.2	-	-	0.0	-	-	0.4	100.0	E	0.6	140.0	SE	1.2	120.0	ESE	0.3	132.0	SE
05:00 AM - 06:00 AM	1.2	223.0	SW	0.5	104.0	ESE	0.6	88.0	E	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-
06:00 AM - 07:00 AM	0.1	-	-	0.0	-	-	0.9	103.0	ESE	1.0	101.0	E	0.4	132.0	SE	0.3	131.0	SE	0.8	134.0	SE
07:00 AM - 08:00 AM	0.0	-	-	0.3	36.0	NE	0.5	81.0	E	0.0	-	-	0.3	119.0	ESE	0.6	136.0	SE	0.0	-	-
08:00 AM - 09:00 AM	0.5	90.0	E	0.9	117.0	ESE	1.4	88.0	E	0.0	-	-	0.8	125.0	SE	0.1	-	-	1.2	122.0	ESE
09:00 AM - 10:00 AM	1.1	97.0	E	0.5	55.0	NE	0.7	83.0	E	0.8	49.0	NE	0.1	-	-	0.5	134.0	SE	1.0	110.0	ESE
10:00 AM - 11:00 AM	0.4	101.0	E	0.6	94.0	E	0.3	91.0	E	0.2	-	-	1.3	140.0	SE	1.4	156.0	SSE	0.9	138.0	SE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittrantont
Assistant General Manager

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Approved by

Sarayuth Jittrantont
Assistant General Manager

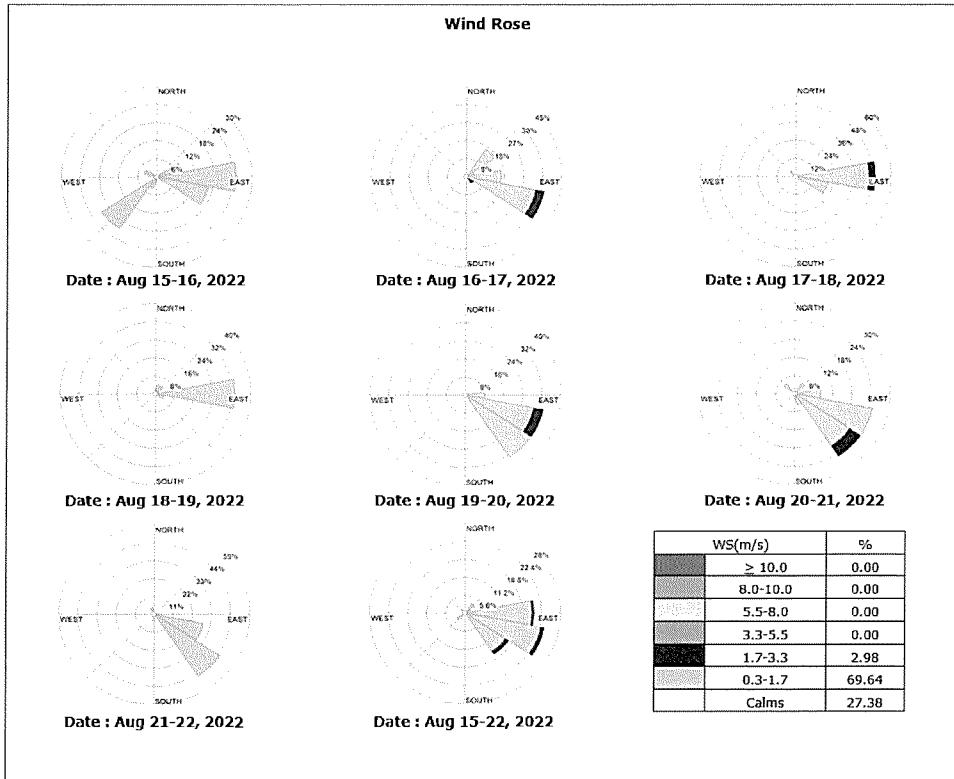


Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2292987
Date Received : Aug 23, 2022
Date Reported : Aug 30, 2022
Report Number : 2388689-1

Page 2 of 2



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2295487
Date Received : Aug 23, 2022
Date Reported : Aug 31, 2022
Report Number : 2394574-1 C1

Page 1 of 2

Sample Number	2295487-1 to 7																				
Parameter	Wind Speed / Wind Direction																				
Location	วัดนางามตอก (GPS 47P 0730822, 1407369)																				
Sampling Date	Aug 15 - Aug 22, 2022																				
Sampling by	Apichart Wilars																				
Time	Aug 15 - Aug 16, 2022			Aug 16 - Aug 17, 2022			Aug 17 - Aug 18, 2022			Aug 18 - Aug 19, 2022			Aug 19 - Aug 20, 2022			Aug 20 - Aug 21, 2022			Aug 21 - Aug 22, 2022		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
11:00 AM - 12:00 PM	0.4	256.0	WSW	2.0	190.0	S	0.9	216.0	SW	1.0	221.0	SW	1.1	216.0	SW	1.6	236.0	SW	1.1	257.0	WSW
12:00 PM - 01:00 PM	0.3	21.0	NNE	0.9	252.0	WSW	1.8	205.0	SSW	1.6	192.0	SSW	1.9	251.0	WSW	0.6	260.0	W	0.9	228.0	SW
01:00 PM - 02:00 PM	2.5	230.0	SW	2.1	237.0	WSW	0.9	207.0	SSW	1.3	200.0	SSW	1.0	213.0	SSW	0.6	230.0	SW	1.0	186.0	S
02:00 PM - 03:00 PM	1.2	243.0	WSW	1.4	229.0	SW	1.8	124.0	SE	1.8	272.0	W	1.5	257.0	WSW	0.8	291.0	WNW	1.3	189.0	S
03:00 PM - 04:00 PM	0.3	264.0	W	1.8	226.0	SW	1.5	204.0	SSW	0.6	154.0	SSE	1.0	275.0	W	0.1	-	-	1.2	230.0	SW
04:00 PM - 05:00 PM	0.3	239.0	WSW	0.5	206.0	SSW	1.0	194.0	SSW	2.5	265.0	W	0.4	206.0	SSW	2.4	244.0	WSW	0.9	191.0	S
05:00 PM - 06:00 PM	0.5	243.0	WSW	1.0	246.0	WSW	0.6	195.0	SSW	0.4	89.0	E	1.7	245.0	WSW	1.5	191.0	S	1.3	238.0	WSW
06:00 PM - 07:00 PM	0.6	261.0	W	0.9	235.0	SW	1.2	236.0	SW	0.1	-	-	0.6	233.0	SW	0.3	228.0	SW	1.7	150.0	SSE
07:00 PM - 08:00 PM	0.6	140.0	SE	0.1	-	-	0.7	231.0	SW	0.3	261.0	W	0.1	-	-	0.4	240.0	WSW	0.7	241.0	WSW
08:00 PM - 09:00 PM	0.7	8.0	N	1.1	250.0	WSW	1.0	216.0	SW	0.1	-	-	0.3	359.0	N	0.6	280.0	W	1.1	241.0	WSW
09:00 PM - 10:00 PM	0.3	321.0	NW	2.1	232.0	SW	0.4	256.0	WSW	0.0	-	-	0.6	276.0	W	0.1	-	-	1.0	272.0	W
10:00 PM - 11:00 PM	0.4	17.0	NNE	0.7	245.0	WSW	0.3	21.0	NNE	0.1	-	-	0.0	-	-	0.5	286.0	WNW	0.7	211.0	SSW
11:00 PM - 12:00 AM	1.0	106.0	ESE	0.4	291.0	WNW	0.0	-	-	1.5	233.0	SW	0.0	-	-	0.0	-	-	2.2	205.0	SSW
12:00 AM - 01:00 AM	0.9	23.0	NNE	0.0	-	-	0.1	-	-	1.0	220.0	SW	0.0	-	-	0.0	-	-	1.4	203.0	SSW
01:00 AM - 02:00 AM	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.3	283.0	WNW	0.6	6.0	N	0.6	262.0	SW
02:00 AM - 03:00 AM	0.0	-	-	0.0	-	-	0.8	261.0	W	0.0	-	-	0.2	-	-	0.2	-	-	1.0	232.0	SW
03:00 AM - 04:00 AM	0.0	-	-	0.2	-	-	0.4	332.0	NNW	0.3	268.0	W	0.0	-	-	0.0	-	-	0.6	301.0	WNW
04:00 AM - 05:00 AM	0.9	263.0	W	0.7	266.0	W	0.0	-	-	0.2	-	-	0.0	-	-	0.0	-	-	0.0	-	-
05:00 AM - 06:00 AM	0.2	-	-	0.9	258.0	WSW	0.0	-	-	0.0	-	-	0.3	287.0	WNW	0.6	298.0	WNW	0.0	-	-
06:00 AM - 07:00 AM	0.3	200.0	SSW	1.5	305.0	NW	0.5	270.0	W	0.0	-	-	0.0	-	-	0.0	-	-	0.2	-	-
07:00 AM - 08:00 AM	0.0	-	-	0.7	234.0	SW	0.3	335.0	NNW	1.0	268.0	W	0.0	-	-	0.0	-	-	0.0	-	-
08:00 AM - 09:00 AM	0.4	262.0	W	0.9	243.0	WSW	0.1	-	-	0.8	236.0	SW	0.2	-	-	0.7	310.0	NW	1.2	258.0	WSW
09:00 AM - 10:00 AM	0.5	235.0	SW	1.1	196.0	SSW	2.9	214.0	SW	0.9	267.0	W	1.4	254.0	WSW	1.0	217.0	SW	1.0	219.0	NW
10:00 AM - 11:00 AM	1.2	197.0	SSW	0.1	-	-	1.7	201.0	SSW	1.7	129.0	SE	1.4	236.0	SW	1.5	220.0	SW	0.8	253.0	WSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jitranont
Assistant General Manager

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Sarayuth Jitranont
Assistant General Manager

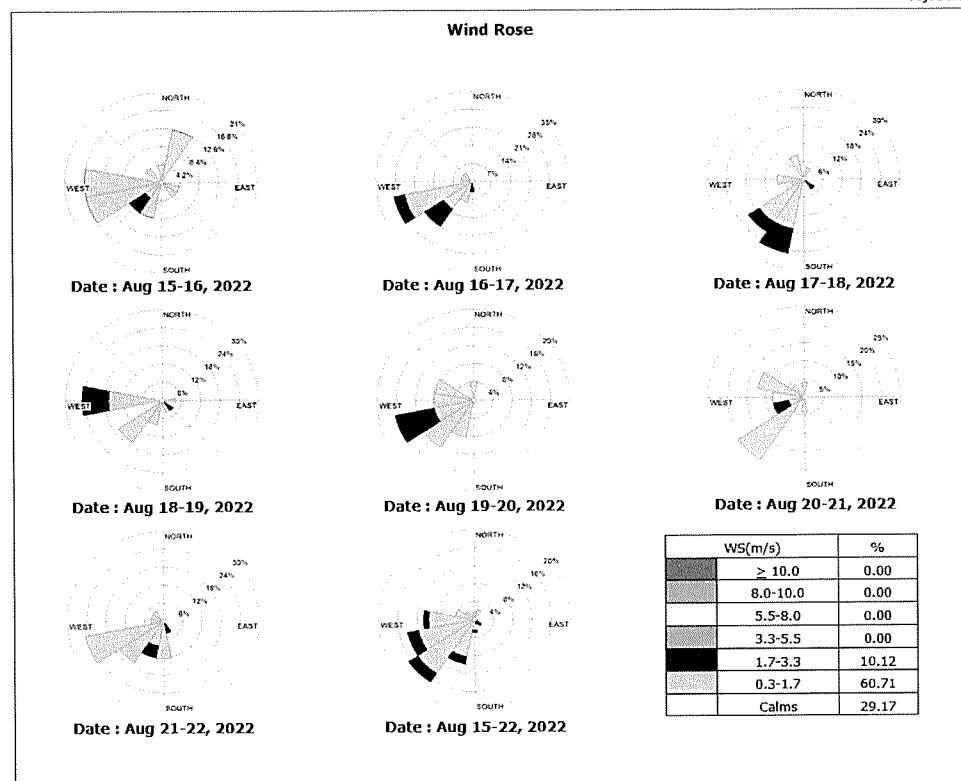


Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2295487
Date Received : Aug 23, 2022
Date Reported : Aug 31, 2022
Report Number : 2394574-1 C1

Page 2 of 2



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2293016
Date Received : Aug 23, 2022
Date Reported : Aug 30, 2022
Report Number : 2388735-1

Page 1 of 2

Sample Number	2293016-1 to 7																				
Parameter	Wind Speed / Wind Direction																				
Location	กรุงเทพมหานคร (GPS 47P 729829, 1403305)																				
Sampling Date	Aug 15 - Aug 22, 2022																				
Sampling by	Apichart Wilars																				
Time	Aug 15 - Aug 16, 2022			Aug 16 - Aug 17, 2022			Aug 17 - Aug 18, 2022			Aug 18 - Aug 19, 2022			Aug 19 - Aug 20, 2022			Aug 20 - Aug 21, 2022			Aug 21 - Aug 22, 2022		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
10:00 AM - 11:00 AM	0.5	176.2	S	1.7	232.0	SW	1.4	115.7	ESE	0.7	99.9	E	1.7	91.9	E	0.5	94.7	E	2.6	171.5	S
11:00 AM - 12:00 PM	1.9	170.7	S	0.6	132.2	SE	2.5	113.1	ESE	1.5	96.6	E	0.7	146.9	SSE	2.9	92.7	E	1.4	183.8	S
12:00 PM - 01:00 PM	1.0	165.6	SSE	0.9	131.2	SE	2.0	109.6	ESE	2.5	93.8	E	0.7	180.4	S	0.9	92.4	E	1.0	188.8	S
01:00 PM - 02:00 PM	0.5	162.7	SSE	0.6	130.1	SE	1.0	185.0	S	1.9	89.8	E	0.7	189.2	S	0.8	91.1	E	1.3	168.0	SSE
02:00 PM - 03:00 PM	1.8	159.3	SSE	1.8	129.3	SE	2.2	185.0	S	1.1	88.7	E	0.8	188.8	S	0.4	185.0	S	2.1	138.4	SE
03:00 PM - 04:00 PM	1.2	158.3	SSE	0.9	128.6	SE	0.1	-	-	0.4	89.7	E	1.2	160.3	SSE	2.0	185.0	S	0.4	128.1	SE
04:00 PM - 05:00 PM	2.3	157.5	SSE	1.0	127.5	SE	0.4	185.0	S	0.4	90.4	E	1.0	136.7	SE	0.6	185.0	S	2.5	126.0	SE
05:00 PM - 06:00 PM	0.5	157.7	SSE	1.9	126.8	SE	0.6	106.3	ESE	0.7	91.4	E	0.7	127.5	SE	1.2	200.0	SSW	1.2	125.2	SE
06:00 PM - 07:00 PM	0.5	155.7	SSE	0.4	126.7	SE	0.6	106.5	ESE	0.7	92.5	E	0.8	123.2	ESE	0.3	200.0	SSW	1.0	126.0	SE
07:00 PM - 08:00 PM	0.5	147.5	SSE	1.0	180.0	S	0.5	106.6	ESE	0.7	185.0	S	0.6	110.7	ESE	1.0	201.0	SSW	0.3	180.0	S
08:00 PM - 09:00 PM	0.6	140.7	SE	1.1	185.0	S	0.5	107.0	ESE	0.3	178.0	S	0.8	100.0	E	0.8	89.8	E	0.6	185.0	S
09:00 PM - 10:00 PM	0.8	185.0	S	0.9	185.0	S	0.6	107.1	ESE	0.7	196.0	SSW	0.9	96.4	E	1.3	90.2	E	1.0	184.0	S
10:00 PM - 11:00 PM	0.7	186.0	S	0.4	184.0	S	0.5	106.9	ESE	0.8	185.0	S	0.8	94.7	E	0.1	-	-	1.1	128.2	SE
11:00 PM - 12:00 AM	0.6	185.0	S	0.7	123.9	SE	0.4	107.0	ESE	0.7	189.0	S	0.4	94.6	E	2.2	90.4	E	0.7	127.8	SE
12:00 AM - 01:00 AM	0.5	136.8	SE	1.3	123.9	SE	1.6	107.0	ESE	0.2	-	-	0.5	95.2	E	0.5	90.6	E	0.6	128.0	SE
01:00 AM - 02:00 AM	0.4	136.3	SE	0.3	123.5	ESE	0.9	106.4	ESE	0.6	95.2	E	0.6	95.2	E	0.8	90.3	E	0.8	126.2	SE
02:00 AM - 03:00 AM	0.8	136.4	SE	0.9	123.2	ESE	0.8	106.2	ESE	0.5	95.0	E	0.7	45.0	NE	1.0	90.0	E	0.9	115.8	ESE
03:00 AM - 04:00 AM	0.9	136.5	SE	0.8	122.8	ESE	0.8	200.0	SSW	0.8	95.3	E	0.8	46.0	NE	0.4	200.0	SSW	0.4	109.8	ESE
04:00 AM - 05:00 AM	0.7	135.8	SE	1.9	122.0	ESE	0.7	210.0	SSW	0.6	200.0	SSW	0.2	-	-	0.6	210.0	SSW	0.3	108.1	ESE
05:00 AM - 06:00 AM	0.5	135.9	SE	0.8	122.0	ESE	2.1	230.0	SW	2.6	210.0	SSW	1.0	47.0	NE	0.3	190.0	S	0.4	108.3	ESE
06:00 AM - 07:00 AM	0.6	136.4	SE	2.7	123.6	ESE	0.6	231.0	SW	1.2	201.0	SSW	1.6	46.0	NE	0.2	-	-	0.5	108.2	ESE
07:00 AM - 08:00 AM	0.6	230.0	SW	1.7	122.8	ESE	1.4	235.0	SW	0.6	203.0	SSW	1.8	97.7	E	0.4	185.0	S	1.5	180.0	S
08:00 AM - 09:00 AM	0.4	230.0	SW	0.9	120.8	ESE	0.7	105.8	ESE	0.4	93.7	E	1.4	98.3	E	1.0	101.0	E	1.4	185.0	S
09:00 AM - 10:00 AM	1.1	231.0	SW	1.9	118.7	FSF	1.7	103.6	FSF	0.9	92.1	E	0.8	97.9	E	1.8	145.8	SE	1.6	185.0	S

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sarayuth Jittrantont
Assistant General Manager

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Approved by

Sarayuth Jittrantont
Assistant General Manager

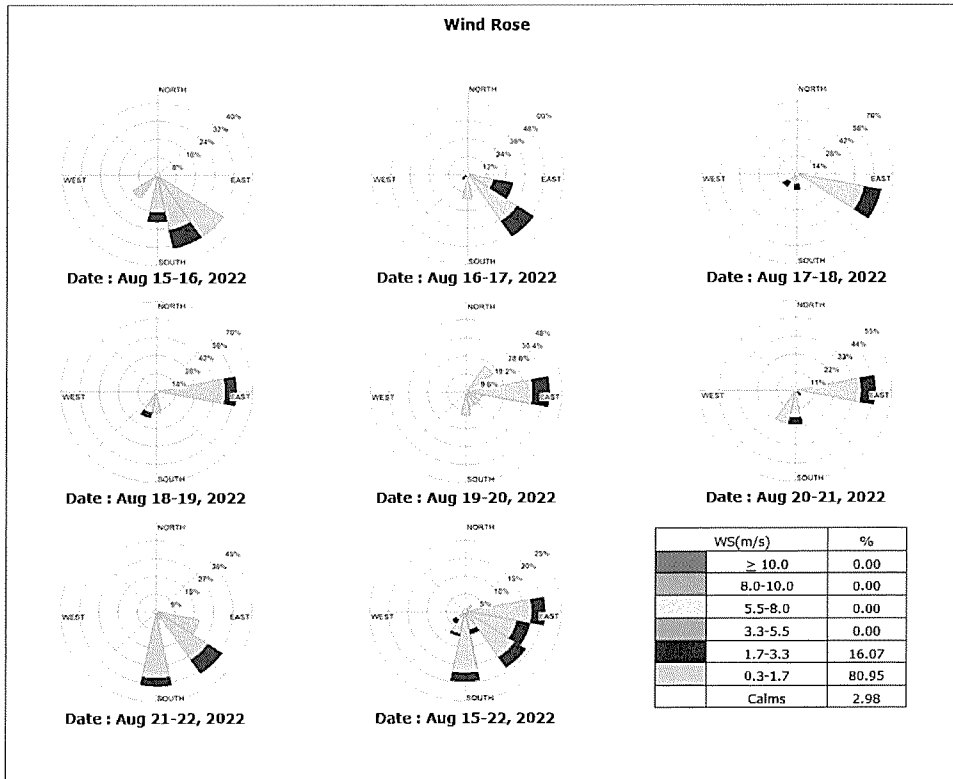


Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2293016
Date Received : Aug 23, 2022
Date Reported : Aug 30, 2022
Report Number : 2388735-1

Page 2 of 2



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2293095
Date Received : Aug 23, 2022
Date Reported : Aug 30, 2022
Report Number : 2388838-1

Page 1 of 2

Sample Number2293095-1 to 7

ParameterWind Speed / Wind Direction

Locationกรุงเทพมหานคร (GPS 47P 0729433, 1412978)

Sampling DateAug 15 - Aug 22, 2022

Sampling byApichart Wilars

Time	Aug 15 - Aug 16, 2022			Aug 16 - Aug 17, 2022			Aug 17 - Aug 18, 2022			Aug 18 - Aug 19, 2022			Aug 19 - Aug 20, 2022			Aug 20 - Aug 21, 2022			Aug 21 - Aug 22, 2022		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
01:00 PM - 02:00 PM	1.2	180.0	S	0.7	185.0	S	2.3	107.0	S	1.1	155.0	SSE	0.6	228.0	SW	0.5	198.0	SSW	0.4	179.0	S
02:00 PM - 03:00 PM	0.6	188.0	S	0.9	240.0	WSW	2.8	211.0	SSW	1.7	226.0	SW	3.1	243.0	WSW	0.6	190.0	S	0.2	-	-
03:00 PM - 04:00 PM	2.9	187.0	S	1.4	219.0	SW	0.4	223.0	SW	1.3	182.0	S	1.7	170.0	S	1.0	188.0	S	0.1	-	-
04:00 PM - 05:00 PM	1.9	95.0	E	1.7	202.0	SSW	1.6	235.0	SW	1.8	191.0	S	1.7	169.0	S	0.5	176.0	S	1.1	211.0	SSW
05:00 PM - 06:00 PM	1.8	216.0	SW	2.6	51.0	NE	1.7	223.0	SW	1.5	219.0	SW	2.7	231.0	SW	0.9	235.0	SW	1.8	179.0	S
06:00 PM - 07:00 PM	1.0	41.0	NE	0.8	113.0	ESE	1.3	154.0	SSE	1.6	153.0	SSE	0.4	210.0	SSW	0.3	227.0	SW	2.3	219.0	SW
07:00 PM - 08:00 PM	1.4	66.0	ENE	1.1	113.0	ESE	1.1	209.0	SSW	2.5	152.0	SSE	1.1	135.0	SE	1.2	237.0	WSW	1.7	166.0	SSE
08:00 PM - 09:00 PM	1.0	17.0	NNE	0.8	159.0	SSE	1.0	223.0	SW	1.4	208.0	SSW	0.1	-	-	0.2	-	-	1.3	224.0	SW
09:00 PM - 10:00 PM	1.5	19.0	NNE	1.3	215.0	SW	0.5	148.0	SSE	1.3	209.0	SSW	1.7	201.0	SSW	0.3	211.0	SSW	0.8	95.0	E
10:00 PM - 11:00 PM	1.6	109.0	ESE	0.5	203.0	SSW	0.8	219.0	SW	0.6	208.0	SSW	1.2	1.0	N	0.2	-	-	0.8	96.0	E
11:00 PM - 12:00 AM	1.8	45.0	NE	1.5	183.0	S	1.0	218.0	SW	0.7	209.0	SSW	0.7	90.0	E	0.5	134.0	SE	2.1	95.0	E
12:00 AM - 01:00 AM	0.9	45.0	NE	1.5	242.0	WSW	0.6	218.0	SW	0.4	209.0	SSW	0.0	-	-	0.5	48.0	NE	1.3	96.0	E
01:00 AM - 02:00 AM	0.5	46.0	NE	0.7	195.0	SSW	0.4	140.0	SE	0.8	226.0	SW	0.6	183.0	S	0.4	195.0	SSW	0.3	214.0	SW
02:00 AM - 03:00 AM	1.0	45.0	NE	1.8	159.0	SSE	0.9	188.0	S	1.2	235.0	SW	0.8	199.0	SSW	1.1	238.0	WSW	1.5	213.0	SSW
03:00 AM - 04:00 AM	0.7	170.0	S	0.5	206.0	SSW	1.6	237.0	WSW	0.4	118.0	ESE	0.6	238.0	WSW	0.7	220.0	SW	0.7	177.0	SSE
04:00 AM - 05:00 AM	0.7	194.0	SSW	1.9	218.0	SW	0.6	233.0	SW	1.5	241.0	WSW	1.2	188.0	S	0.1	-	-	3.0	202.0	SSW
05:00 AM - 06:00 AM	0.3	171.0	S	1.7	244.0	WSW	0.7	231.0	SW	0.7	217.0	SW	0.6	159.0	SSE	0.3	169.0	S	2.4	218.0	SW
06:00 AM - 07:00 AM	1.7	261.0	W	0.3	236.0	SW	1.8	157.0	SSE	0.5	161.0	SSE	0.4	205.0	SSW	0.6	164.0	SSE	1.9	180.0	S
07:00 AM - 08:00 AM	1.0	214.0	SW	1.1	222.0	SW	1.6	187.0	S	0.6	229.0	SW	0.2	-	-	0.1	-	-	0.4	185.0	S
08:00 AM - 09:00 AM	1.4	225.0	SW	1.4	224.0	SW	0.7	169.0	S	1.1	227.0	SW	0.8	235.0	SW	1.0	223.0	SW	1.1	186.0	S
09:00 AM - 10:00 AM	1.4	219.0	SW	1.0	219.0	SW	0.3	194.0	SSW	0.4	205.0	SSW	1.3	57.0	ENE	0.1	-	-	1.2	200.0	SSW
10:00 AM - 11:00 AM	0.3	191.0	S	1.6	199.0	SSW	1.5	151.0	SSE	0.8	182.0	S	1.3	253.0	WSW	0.1	-	-	0.5	201.0	SSW
11:00 AM - 12:00 PM	2.3	157.0	SSE	0.3	231.0	SW	1.5	161.0	SSE	0.5	215.0	SW	1.4	182.0	S	0.3	229.0	SW	1.0	220.0	SW
12:00 PM - 01:00 PM	1.7	204.0	SSW	1.6	193.0	SSW	0.1	-	-	1.3	224.0	SW	0.5	202.0	SSW	0.5	179.0	S	1.2	221.0	SW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jitranont
Assistant General Manager

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Approved by

Sarayuth Jitranont
Assistant General Manager

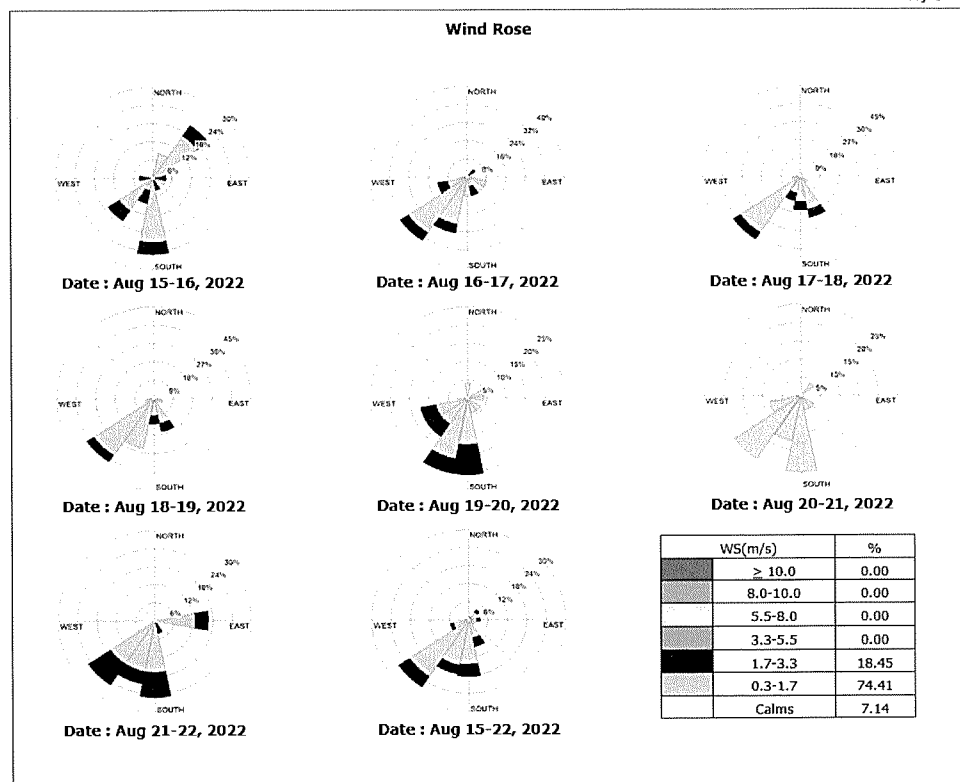


Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2293095
Date Received : Aug 23, 2022
Date Reported : Aug 30, 2022
Report Number : 2388838-1

Page 2 of 2



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID : 2293096
Date Received : Aug 23, 2022
Date Reported : Aug 30, 2022
Report Number : 2388837-1

Page 1 of 2

Sample Number : 2293096-1 to 7
Parameter : Wind Speed / Wind Direction
Location : กรุงเทพมหานคร (GPS 47P 0725073, 1412550)
Sampling Date : Aug 15 - Aug 22, 2022
Sampling by : Apichart Wilars

Time	Aug 15 - Aug 16, 2022			Aug 16 - Aug 17, 2022			Aug 17 - Aug 18, 2022			Aug 18 - Aug 19, 2022			Aug 19 - Aug 20, 2022			Aug 20 - Aug 21, 2022			Aug 21 - Aug 22, 2022		
	WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)		WS (m/s)	WD (deg)	
12:00 PM - 01:00 PM	0.5	155.0	SSE	1.1	220.0	SW	2.2	229.0	SW	1.7	210.0	SSW	3.1	288.0	WNW	1.5	249.0	WSW	0.7	64.0	ENE
01:00 PM - 02:00 PM	0.9	154.0	SSE	1.1	237.0	WSW	1.7	187.0	S	1.5	10.0	N	0.9	202.0	SSW	0.8	211.0	SSW	1.6	230.0	SW
02:00 PM - 03:00 PM	1.2	154.0	SSE	0.4	220.0	SW	1.4	176.0	S	1.6	79.0	E	0.9	234.0	SW	0.4	85.0	E	1.5	181.0	S
03:00 PM - 04:00 PM	1.3	136.0	SE	1.5	223.0	SW	1.2	152.0	SSE	2.4	62.0	ENE	1.6	236.0	SW	1.6	198.0	SSW	0.3	22.0	NNE
04:00 PM - 05:00 PM	0.5	136.0	SE	1.6	220.0	SW	0.8	187.0	S	1.5	153.0	SSE	0.8	215.0	SW	1.8	210.0	SSW	1.3	149.0	SSE
05:00 PM - 06:00 PM	0.9	359.0	N	0.8	53.0	NE	1.3	334.0	NNW	1.6	241.0	WSW	1.6	205.0	SSW	1.9	210.0	SSW	2.5	174.0	S
06:00 PM - 07:00 PM	2.3	10.0	N	1.6	352.0	N	0.5	226.0	SW	1.5	216.0	SW	1.5	3.0	N	2.5	209.0	SSW	1.6	174.0	S
07:00 PM - 08:00 PM	0.3	296.0	WNW	0.8	225.0	SW	1.5	216.0	SW	0.8	75.0	ENE	1.4	2.0	N	1.6	353.0	N	1.5	174.0	S
08:00 PM - 09:00 PM	0.6	17.0	NNE	1.6	238.0	WSW	0.7	242.0	WSW	0.5	236.0	SW	1.2	70.0	ENE	2.5	353.0	N	1.6	183.0	S
09:00 PM - 10:00 PM	1.2	15.0	NNE	1.4	239.0	WSW	1.2	253.0	WSW	1.6	236.0	SW	0.5	26.0	NNE	1.6	353.0	N	2.4	222.0	SW
10:00 PM - 11:00 PM	1.2	358.0	N	1.5	239.0	WSW	1.6	253.0	WSW	1.5	236.0	SW	0.6	26.0	NNE	1.4	353.0	N	1.3	153.0	SSE
11:00 PM - 12:00 AM	0.8	323.0	NW	1.3	238.0	WSW	1.4	253.0	WSW	1.6	236.0	SW	0.8	26.0	NNE	1.5	221.0	SW	2.5	224.0	SW
12:00 AM - 01:00 AM	0.9	320.0	NW	0.5	238.0	WSW	0.6	220.0	SW	1.2	236.0	SW	1.6	26.0	NNE	1.6	221.0	SW	1.6	193.0	SSW
01:00 AM - 02:00 AM	0.8	291.0	WNW	0.5	238.0	WSW	0.5	220.0	SW	1.3	236.0	SW	1.5	26.0	NNE	0.5	221.0	SW	2.4	51.0	NE
02:00 AM - 03:00 AM	0.7	12.0	NNE	1.6	225.0	SW	1.5	20.0	NNE	0.6	311.0	NW	1.6	26.0	NNE	1.6	221.0	SW	1.5	25.0	NNE
03:00 AM - 04:00 AM	0.9	12.0	NNE	0.8	225.0	SW	1.6	20.0	NNE	1.3	31.0	NNE	0.2	-	-	2.1	221.0	SW	1.3	25.0	NNE
04:00 AM - 05:00 AM	1.2	12.0	NNE	1.6	222.0	SW	1.2	246.0	WSW	1.1	226.0	SW	1.6	26.0	NNE	1.6	218.0	SW	2.1	25.0	NNE
05:00 AM - 06:00 AM	0.3	142.0	SE	1.4	215.0	SW	2.0	213.0	SSW	2.6	191.0	S	1.5	223.0	SW	1.5	255.0	WSW	1.1	180.0	S
06:00 AM - 07:00 AM	0.6	203.0	SSW	0.7	108.0	ESE	1.1	243.0	WSW	0.8	212.0	SSW	0.3	232.0	SW	1.1	219.0	SW	1.4	214.0	SW
07:00 AM - 08:00 AM	1.2	182.0	S	1.9	284.0	WNW	0.8	175.0	S	2.3	261.0	W	1.2	202.0	SSW	0.6	264.0	W	2.2	234.0	SW
08:00 AM - 09:00 AM	2.0	176.0	S	1.8	194.0	SSW	1.3	263.0	W	1.1	248.0	WSW	2.0	216.0	SW	1.6	193.0	SSW	1.2	180.0	S
09:00 AM - 10:00 AM	1.6	269.0	W	1.2	197.0	SSW	1.4	239.0	WSW	1.1	266.0	W	1.3	292.0	WNW	0.7	107.0	ESE	1.3	185.0	S
10:00 AM - 11:00 AM	1.0	254.0	WSW	1.1	153.0	SSE	1.5	185.0	S	0.8	315.0	NW	0.6	234.0	SW	1.0	215.0	SW	0.8	189.0	S
11:00 AM - 12:00 PM	1.7	192.0	SSW	1.9	214.0	SW	0.1	-	-	1.6	228.0	SW	0.6	264.0	W	1.9	146.0	SE	0.9	230.0	SW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

Sarayuth Jittranoit
Assistant General Manager

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Approved by

Sarayuth Jittranoit
Assistant General Manager



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID : 2293096

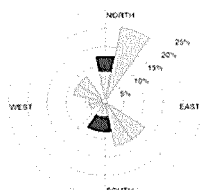
Date Received : Aug 23, 2022

Date Reported : Aug 30, 2022

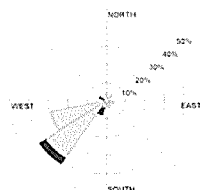
Report Number : 2388837-1

Page 2 of 2

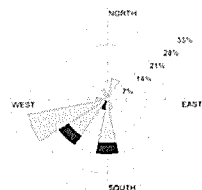
Wind Rose



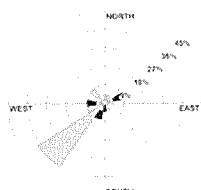
Date : Aug 15-16, 2022



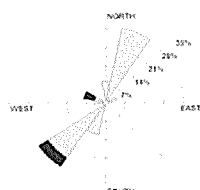
Date : Aug 16-17, 2022



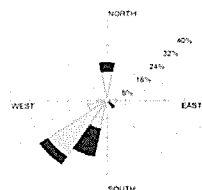
Date : Aug 17-18, 2022



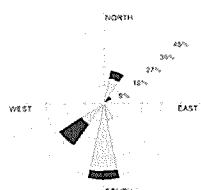
Date : Aug 18-19, 2022



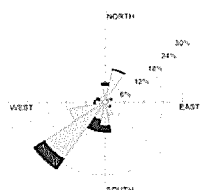
Date : Aug 19-20, 2022



Date : Aug 20-21, 2022



Date : Aug 21-22, 2022



Date : Aug 15-22, 2022

WS(m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	16.07
0.3-1.7	82.74
Calms	1.19

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Approved by

Sarayuth Jitranont
Assistant General Manager

ภาคผนวก ค-2

คุณภาพอากาศจากปล่องระบาย



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293821
Date Received : Aug 19, 2022
Date Reported : Sep 08, 2022
Report Number: 2428167-1

Page 1 of 2

Sample Number 2293821-1
Sampled Date Aug 19, 2022
Sample Description Emission from Stationary Source
Location ปล่องระบายของ PC boiler (GPS 47P 0731759, 1402063)
Date Analysis Commenced Aug 22, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one sorbent tube, refrigerated

Stack Description

Ambient Pressure	758	mmHg	Diameter	8.75	m	Oxygen	5.4	%
Ambient Temperature	30.0	°C	Shape	Circle		Carbon Dioxide	14.6	%
Type of Process	Combustion		Stack Temperature	90.0	°C	Gas Velocity	18.3	m/s
Type of Fuel	Coal		Moisture	11.70	%	Flow Rate (Actual O2)	2855495	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 % O ₂ at 5.4 % O ₂	Guideline (1)	Guideline (2)	Method	Testing Location	
Air Testing										
Total Suspended Particulate	11:00 AM - 11:48 AM	mg/m ³	-	0.5	1.9	2.1	55	80	US EPA, Method 5	Rayong

Guideline :

Guideline (1) Environmental Impact Assessment Report of GHECO-ONE COMPANY LIMITED.
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)
ทะเบียนเลขที่ ว-323-ก-9447

Approved by

D. Chongchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ก-9442

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S:\Reports_Air Stack_O2_2GL.rpt (8:56AM)

19517-21/ EMAIL



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293821
Date Received : Aug 19, 2022
Date Reported : Sep 08, 2022
Report Number: 2428167-1

Page 2 of 2

Sample Number 2293821-1
Sampled Date Aug 19, 2022
Sample Description Emission from Stationary Source
Location ปล่องระบายของ PC boiler (GPS 47P 0731759, 1402063)
Date Analysis Commenced Aug 22, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one sorbent tube, refrigerated

Stack Description

Ambient Pressure	758	mmHg	Diameter	8.75	m	Oxygen	5.4	%
Ambient Temperature	30.0	°C	Shape	Circle		Carbon Dioxide	14.6	%
Type of Process	Combustion		Stack Temperature	90.0	°C	Gas Velocity	18.3	m/s
Type of Fuel	Coal		Moisture	11.70	%	Flow Rate (Actual O2)	2855495	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
Air Testing									
Total Suspended Particulate *	11:00 AM - 11:48 AM	g/s	-	-	1.72	38.67	-	Calculated	Rayong

Guideline :

Guideline (1) Environmental Impact Assessment Report of GHECO-ONE COMPANY LIMITED.
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Note:

This Analysis test report is reissued to supersede report No 2422687-1 Reported : Sep 012022 due to revise analytical information

Sampled By : Kantaphon Maneesampan , Chatchai Sukpia

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)
ทะเบียนเลขที่ ว-323-ก-9447

Approved by

D. Chongchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ว-323-ก-9442

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S:\Reports_Air Stack_O2_2GL.rpt (8:56AM)

19517-21/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293821
Date Received : Aug 19, 2022
Date Reported : Sep 09, 2022
Report Number: 2428167-2

Page 1 of 2

Sample Number 2293821-1
Sampled Date Aug 19, 2022
Sample Description Emission from Stationary Source
Location ปล่องโรงงานของ PC boiler (GPS 47P 0731759, 1402063)
Date Analysis Commenced Aug 26, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one sorbent tube, refrigerated

Stack Description

Ambient Pressure	758	mmHg	Diameter	8.75	m	Oxygen	5.4	%
Ambient Temperature	30.0	°C	Shape	Circle		Carbon Dioxide	14.6	%
Type of Process	Combustion		Stack Temperature	90.0	°C	Gas Velocity	18.3	m/s
Type of Fuel	Coal		Moisture	11.70	%	Flow Rate (Actual O2)	2855495	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 % O ₂	Result at 5.4 % O ₂	Method	Testing Location
Air Testing								
Vinyl chloride	11:10 AM - 11:25 AM	ppm	-	1.00	<1.0	<1.0	US EPA, Method 18	Bangkok
1,2-Dichloroethane	11:10 AM - 11:25 AM	ppm	-	0.3	<0.3	<0.3	US EPA, Method 18	Bangkok
1,2-Dichloropropane	11:10 AM - 11:25 AM	ppm	-	0.3	<0.3	<0.3	US EPA, Method 18	Bangkok
1,3-Butadiene	11:10 AM - 11:25 AM	ppm	-	0.5	<0.5	<0.5	US EPA, Method 18	Bangkok
Benzene	11:10 AM - 11:25 AM	ppm	-	0.3	<0.3	<0.3	US EPA, Method 18	Bangkok
Chloroform	11:10 AM - 11:25 AM	ppm	-	0.2	<0.2	<0.2	US EPA, Method 18	Bangkok
Methylene Chloride	11:10 AM - 11:25 AM	ppm	-	0.3	<0.3	<0.3	US EPA, Method 18	Bangkok
Tetrachloroethylene	11:10 AM - 11:25 AM	ppm	-	0.2	<0.2	<0.2	US EPA, Method 18	Bangkok
Trichloroethylene	11:10 AM - 11:25 AM	ppm	-	0.2	<0.2	<0.2	US EPA, Method 18	Bangkok
Metals Testing								
Cadmium	11:00 AM - 11:48 AM	mg/m3	-	0.01	<0.01	<0.01	US EPA, Method 29	Bangkok

Note:

This Analysis test report is reissued to supersede report No 2422687-1 Reported : Sep 012022 due to revise analytical information

Sampled By : Kantaphon Maneesampan , Chatchai Sukpia

Approved by

Sararat Mongkonjirawut
Supervisor

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19517-21/ EMAIL

S:\Reports\Air_Stack_O2_NoGL.rpt (2:39PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293821
Date Received : Aug 19, 2022
Date Reported : Sep 09, 2022
Report Number: 2428167-2

Page 2 of 2

Sample Number 2293821-1
Sampled Date Aug 19, 2022
Sample Description Emission from Stationary Source
Location ปล่องโรงงานของ PC boiler (GPS 47P 0731759, 1402063)
Date Analysis Commenced Aug 26, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one sorbent tube, refrigerated

Stack Description

Ambient Pressure	758	mmHg	Diameter	8.75	m	Oxygen	5.4	%
Ambient Temperature	30.0	°C	Shape	Circle		Carbon Dioxide	14.6	%
Type of Process	Combustion		Stack Temperature	90.0	°C	Gas Velocity	18.3	m/s
Type of Fuel	Coal		Moisture	11.70	%	Flow Rate (Actual O2)	2855495	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 % O ₂	Result at 5.4 % O ₂	Method	Testing Location
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Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Sararat Mongkonjirawut
Supervisor

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S:\Reports\Air_Stack_O2_NoGL.rpt (2:39PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293821
Date Received : Aug 19, 2022
Date Reported : Sep 09, 2022
Report Number: 2428167-3

Page 1 of 1

Sample Number 2293821-1
Sampled Date Aug 19, 2022
Sample Description Emission from Stationary Source
Location ปล่องโรงงานผลิต PC boiler (GPS 47P 0731759, 1402063)
Date Analysis Commenced Aug 26, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish, one plastic bottle and one sorbent tube, refrigerated

Stack Description

Ambient Pressure	758	mmHg	Diameter	8.75	m	Oxygen	5.4	%
Ambient Temperature	30.0	°C	Shape	Circle		Carbon Dioxide	14.6	%
Type of Process	Combustion		Stack Temperature	90.0	°C	Gas Velocity	18.3	m/s
Type of Fuel	Coal		Moisture	11.70	%	Flow Rate (Actual O2)	2855495	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 % O ₂	Result at 5.4 % O ₂	Guideline Limit	Method	Testing Location
Metals Testing									
Arsenic	11:00 AM - 11:48 AM	mg/m3	-	0.02	<0.02	<0.02	16	US EPA, Method 29	Bangkok
Lead	11:00 AM - 11:48 AM	mg/m3	-	0.01	<0.01	<0.01	24	US EPA, Method 29	Bangkok
Mercury	11:00 AM - 11:48 AM	mg/m3	-	0.0002	<0.0002	<0.0002	2.4	US EPA, Method 29	Bangkok

Guideline :

Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Note:

This Analysis test report is reissued to supersede report No 2422687-1 Reported : Sep 012022 due to revise analytical information

Sampled By : Kantaphon Maneeasampan , Chatchai Sukpia

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management

Sawitree N.
Sawitree Noisangiam
Manager
โทร: 09-204-4-4709

Approved by

Kanokkorn Anek
Kanokkorn Anek
Senior Manager
โทร: 09-204-4-6111

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293821
Date Received : Aug 19, 2022
Date Reported : Sep 09, 2022
Report Number: 2428168-1

Page 1 of 2

Sample Number 2293821-2
Sampled Date Aug 19, 2022
Sample Description Emission from Stationary Source
Location ปล่องโรงงานผลิต PC boiler (GPS 47P 0731759, 1402063)
Date Analysis Commenced Aug 22, 2022
Condition of Sample Extracted into one filter paper placed in plastic cassette

Stack Description

Ambient Pressure	758	mmHg	Diameter	8.75	m	Oxygen	5.4	%
Ambient Temperature	30.0	°C	Shape	Circle		Carbon Dioxide	14.2	%
Type of Process	Combustion		Stack Temperature	90.0	°C	Gas Velocity	18.2	m/s
Type of Fuel	Coal		Moisture	10.17	%	Flow Rate (Actual O2)	2895144	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 % O ₂	Result at 5.4 % O ₂	Method	Testing Location
Air Testing								
PM10	12:10 PM - 01:10 PM	mg/m3	-	0.5	1.83	2.04	US EPA, Method 201A	Bangkok

Approved by

Saratat Mongkonjirawat
Saratat Mongkonjirawat
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293821
Date Received : Aug 19, 2022
Date Reported : Sep 09, 2022
Report Number: 2428168-1

Page 2 of 2

Sample Number 2293821-2
Sampled Date Aug 19, 2022
Sample Description Emission from Stationary Source
Location ปล่องโรงงานของ PC boiler (GPS 47P 0731759, 1402063)
Date Analysis Commenced Aug 22, 2022
Condition of Sample Extracted into one filter paper placed in plastic cassette

Stack Description

Ambient Pressure	758	mmHg	Diameter	8.75	m	Oxygen	5.4	%
Ambient Temperature	30.0	°C	Shape	Circle		Carbon Dioxide	14.2	%
Type of Process	Combustion		Stack Temperature	90.0	°C	Gas Velocity	18.2	m/s
Type of Fuel	Coal		Moisture	10.17	%	Flow Rate (Actual O2)	2895144	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Method	Testing Location
Air Testing							
PM10	12:10 PM - 01:10 PM	g/s	-	-	1.641	Calculated	Bangkok

Note:
This Analysis test report is reissued to supersede report No 2422688-1 Reported : Sep 012022 due to revise analytical information

Sampled By : Kantaphon Maneesampan , Chatchai Sukpia

Remark :
- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Sararat Mongkonjirawat
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293802
Date Received :Aug 22, 2022
Date Reported :Aug 27, 2022
Report Number :2390483-1

Page 1 of 1

Sample Number 2293802-1
Sample Description Emission from Stationary Source
Location ปล่องโรงงานของ PC boiler
Measurement Date Aug 19, 2022

Stack Description

Ambient Temperature	30	°C	Diameter	8.75	m	Oxygen	5.33	%
Ambient Pressure	758	mmHg	Shape	Circle		Carbon dioxide	14.85	%
Type of Process	Combustion		Stack Temperature	90	°C	Gas Velocity	18.28	m/s
Type of Fuel	Coal		Moisture	11.59	%	Flow Rate	2859845	Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Oxides of Nitrogen (ppm)		Sulfur Dioxide (ppm)	
				at Actual O ₂	at 7% O ₂	at Actual O ₂	at 7% O ₂
1	11:00 AM - 11:20 AM	5.35	14.79	47.29	42.27	9.17	8.20
2	11:21 AM - 11:41 AM	5.32	14.85	48.47	43.24	10.52	9.39
3	11:42 AM - 12:02 PM	5.32	14.89	48.32	43.11	10.98	9.80
Average (ppm)				48.03	42.87	10.23	9.13
Guideline ^{1/} (ppm)				-	56	-	53
Guideline ^{2/} (ppm)				-	200	-	180
Result (mg/Nm ³)				90.36	80.66	26.77	23.89
Emission Rate at Actual O ₂ (g/s)				71.7834		21.2624	
Guideline ^{1/} (g/s)				74.07		97.53	
Method				US EPA Method 7E		US EPA Method 6C	

Sampled By : Anuvat Moungpai

Guideline : ^{1/} Environmental Impact Assessment Report of GHECO-ONE COMPANY LIMITED
^{2/}Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

Wichan Choonharat
Manager
ทะเบียนเลขที่ 7-204-ก-6113

Approved by

Sarayuth Jitranont
Assistant General Manager
ทะเบียนเลขที่ 7-204-ก-4702

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293802
Date Received :Aug 22, 2022
Date Reported :Aug 27, 2022
Report Number :2390483-1

Page 1 of 1

Sample Number 2293802-1
Sample Description Emission from Stationary Source
Location ปล่องโรงงานของ PC boiler
Measurement Date Aug 19, 2022

Stack Description					
Ambient Temperature	30	°C	Diameter	8.75	m
Ambient Pressure	758	mmHg	Shape	Circle	
Type of Process	Combustion		Stack Temperature	90	°C
Type of Fuel	Coal		Moisture	11.59	%
			Oxygen	5.33	%
			Carbon dioxide	14.85	%
			Gas Velocity	18.28	m/s
			Flow Rate	2859845	Nm3/hr

Run No.	Sampling Time	Oxygen (%)	Carbon Dioxide (%)	Carbon Monoxide (ppm)	
				at Actual O ₂	At 7% O ₂
1	11:00 AM - 11:20 AM	5.35	14.79	7.13	6.38
2	11:21 AM - 11:41 AM	5.32	14.85	11.74	10.47
3	11:42 AM - 12:02 PM	5.32	14.89	10.23	9.12
Average (ppm)		5.33	14.85	9.70	8.66
Guideline (ppm)				-	690
Result (mg/Nm ³)				11.11	9.91
Emission Rate at Actual O ₂ (g/s)				8.8245	
Method				US EPA Method 10	

Sampled By : Anuvat Mounapai
Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Technical Management

Wichan Choonharat
Wichan Choonharat
Manager
เบอร์โทร 7-204-6113

Approved by

Sarayuth Jitranont
Sarayuth Jitranont
Assistant General Manager
เบอร์โทร 7-204-4702

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132649
Date Received : Dec 06, 2022
Date Reported : Dec 17, 2022
Report Number: 2478155-1

Page 1 of 1

Sample Number 22132649-1
Sampled Date Dec 06, 2022
Sample Description Emission from Stationary Source
Location ปล่องโรงงานของ PC boiler
Date Analysis Commenced Dec 07, 2022
Condition of Sample Extracted into one filter paper placed in plastic petri dish

Stack Description					
Ambient Pressure	758	mmHg	Diameter	8.75	m
Ambient Temperature	32.0	°C	Shape	Circle	
Type of Process	Combustion		Stack Temperature	84.0	°C
Type of Fuel	Coal		Moisture	11.35	%
			Oxygen	5.6	%
			Carbon Dioxide	13.5	%
			Gas Velocity	18.0	m/s
			Flow Rate (Actual O ₂)	2867343	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O ₂	Guideline Limit	Method	Testing Location
Metals Testing								
Arsenic	10:30 AM - 11:18 AM	mg/m3	-	0.02	<0.02	16	US EPA, Method 29	Bangkok
Cadmium	10:30 AM - 11:18 AM	mg/m3	-	0.01	<0.01	No Standard	US EPA, Method 29	Bangkok
Lead	10:30 AM - 11:18 AM	mg/m3	-	0.01	<0.01	24	US EPA, Method 29	Bangkok
Mercury	10:30 AM - 11:18 AM	mg/m3	-	0.0002	<0.0002	2.4	US EPA, Method 29	Bangkok

Guideline : Notification of the Ministry of Industry 2006 (B.E. 2549) Published in the Royal Government Gazette, Vol.123 Special Part 125 D, dated December 4, 2006 (B.E. 2549)

Sampled By : Tinnakorn Kulchart

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Chanattagim Imchom
Chanattagim Imchom
Supervisor

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ภาคผนวก ค-3

องค์ประกอบของถ่านหิน



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132656
Date Received : Nov 16, 2022
Date Reported : Dec 29, 2022
Report Number : 2533419-1

Page 1 of 3

Sample Number 22132656-1
Sampled Date Nov 16, 2022 11:25 AM
Sample Description Coal
Location ลานกองถ่านหิน 1 Log plus 439
Date Analysis Commenced Nov 18, 2022
Condition of Sample Packed in one plastic bag and two amber plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Arsenic	mg/kg	-	1.00	<0.50	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.20	<0.50	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	3.08	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	-	<0.10	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Moisture and Quality Results						
Ash Content	%	-	-	9.22	ASTM, D7582-15	Bangkok
Sulfur	%	-	-	0.81	ASTM, D4239-18 (Method A)	Bangkok
Total Moisture	%	-	-	22.22	ASTM, D3302/3302M-17	Bangkok

Note : This Analysis test report is reissued to supersede report No.2478174-1, Date Reported : Dec 27, 2022 due to revise analytical information.

Sampling By : Thanasoun Namakunna โทร 09-204-8592

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Savitree N.

Savitree Noisangiam
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132656
Date Received : Nov 16, 2022
Date Reported : Dec 29, 2022
Report Number : 2533419-1

Page 2 of 3

Sample Number 22132656-2
Sampled Date Nov 16, 2022 11:30 AM
Sample Description Coal
Location ลานกองถ่านหิน 2 Avra 443
Date Analysis Commenced Nov 18, 2022
Condition of Sample Packed in one plastic bag and two amber plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Arsenic	mg/kg	-	1.00	<0.50	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.20	<0.50	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	<1.00	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	-	<0.10	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Moisture and Quality Results						
Ash Content	%	-	-	3.81	ASTM, D7582-15	Bangkok
Sulfur	%	-	-	0.52	ASTM, D4239-18 (Method A)	Bangkok
Total Moisture	%	-	-	22.93	ASTM, D3302/3302M-17	Bangkok

Note : This Analysis test report is reissued to supersede report No.2478174-1, Date Reported : Dec 27, 2022 due to revise analytical information.

Sampling By : Thanasoun Namakunna โทร 09-204-8592

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Savitree N.

Savitree Noisangiam
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132656
Date Received : Nov 16, 2022
Date Reported : Dec 29, 2022
Report Number : 2533419-1

Page 3 of 3

Sample Number	22132656-3
Sampled Date	Nov 16, 2022 11:40 AM
Sample Description	Coal
Location	ถ่านหิน 3 Avra 440
Date Analysis Commenced	Nov 18, 2022
Condition of Sample	Packed in one plastic bag and two amber plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Arsenic	mg/kg	-	1.00	<0.50	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.20	<0.50	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	<1.00	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	-	<0.10	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Moisture and Quality Results						
Ash Content	%	-	-	4.77	ASTM, D7582-15	Bangkok
Sulfur	%	-	-	0.52	ASTM, D4239-18 (Method A)	Bangkok
Total Moisture	%	-	-	22.63	ASTM, D3302/3302M-17	Bangkok

Note : This Analysis test report is reissued to supersede report No.2478174-1, Date Reported : Dec 27, 2022 due to revise analytical information.

Sampling By : Thanasoun Namakunna โทร 09-00000000 204-8592

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Savitree N.

Savitree Noisangiam
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location :

Lot ID: 22154863
Date Received : Dec 29, 2022
Date Reported : Jan 12, 2023
Report Number : 2541509-1

Page 1 of 1

Sample Number	22154863-1
Sampled Date	Dec 29, 2022 10:18 AM
Sample Description	Coal
Location	ถ่านหิน 1 AVRA 445
Date Analysis Commenced	Dec 30, 2022
Condition of Sample	Packed in one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.20	<0.20	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Moisture and Quality Results							
Ash Content	%	-	-	5.36	No Standard	ASTM, D 7582-15	Bangkok
Sulfur	%	-	-	0.21	≤1	ASTM, D 3177-02 (R07) mod., ICP	Bangkok
Total Moisture	%	-	-	32.67	No Standard	ASTM, D 3302 -15	Bangkok

Guideline : Client Specification

Sampling By :

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Savitree N.

Savitree Noisangiam
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location :

Lot ID: 22154863

Date Received : Dec 29, 2022

Date Reported : Jan 12, 2023

Report Number : 2541511-1

Page 1 of 1

Sample Number	22154863-3
Sampled Date	Dec 29, 2022 10:24 AM
Sample Description	Coal
Location	กองไฟ 3 AVRA 446
Date Analysis Commenced	Dec 30, 2022
Condition of Sample	Packed in one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.20	<0.20	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	2.39	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Moisture and Quality Results							
Ash Content	%	-	-	4.37	No Standard	ASTM, D 7582-15	Bangkok
Sulfur	%	-	-	0.26	≤1	ASTM, D 3177-02 (R07) mod., ICP	Bangkok
Total Moisture	%	-	-	29.79	No Standard	ASTM, D 3302 -15	Bangkok

Guideline : Client Specification

Sampling By :

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Savitree N.

Savitree Naisangiam
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location :

Lot ID: 22154863

Date Received : Dec 29, 2022

Date Reported : Jan 12, 2023

Report Number : 2541513-1

Page 1 of 1

Sample Number	22154863-5
Sampled Date	Dec 29, 2022 10:29 AM
Sample Description	Coal
Location	กองไฟ 5 AVRA 444
Date Analysis Commenced	Dec 30, 2022
Condition of Sample	Packed in one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Cadmium	mg/kg	-	0.20	<0.20	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Lead	mg/kg	-	1.00	2.02	No Standard	United States Environmental Protection Agency, EPA Method 3050B and 6010D	Bangkok
Mercury	mg/kg	-	1.00	<1.00	No Standard	United States Environmental Protection Agency, EPA Method 7473	Bangkok
Moisture and Quality Results							
Ash Content	%	-	-	15.78	No Standard	ASTM, D 7582-15	Bangkok
Sulfur	%	-	-	0.61	≤1	ASTM, D 3177-02 (R07) mod., ICP	Bangkok
Total Moisture	%	-	-	20.69	No Standard	ASTM, D 3302 -15	Bangkok

Guideline : Client Specification

Sampling By :

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Savitree N.

Savitree Naisangiam
Manager

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ภาคผนวก ค-4

ระดับเสียง



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293107
Date Received : Aug 23, 2022
Date Reported : Aug 26, 2022
Report Number: 2414135-1

Page 1 of 1

Sample Number	2293107-1
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงไฟฟ้าเดิม (GPS 47P 0731886, 1402471)
Measurement Date	Aug 15 - Aug 16, 2022
Measurement by	Satcha Phetsawaeng
Sound Level meter	Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	57.9	77.6	55.4
11:00 AM - 12:00 PM	57.2	80.8	55.8
12:00 PM - 01:00 PM	56.9	70.1	55.9
01:00 PM - 02:00 PM	57.4	79.5	56.1
02:00 PM - 03:00 PM	57.7	79.2	56.2
03:00 PM - 04:00 PM	57.1	68.3	56.3
04:00 PM - 05:00 PM	57.2	68.6	56.3
05:00 PM - 06:00 PM	57.8	75.1	56.7
06:00 PM - 07:00 PM	58.0	75.2	56.9
07:00 PM - 08:00 PM	59.0	74.8	57.1
08:00 PM - 09:00 PM	61.1	74.9	58.6
09:00 PM - 10:00 PM	63.5	77.3	59.1
10:00 PM - 11:00 PM	67.6	72.5	60.2
11:00 PM - 12:00 AM	60.9	74.7	58.4
12:00 AM - 01:00 AM	67.6	73.1	64.0
01:00 AM - 02:00 AM	61.9	70.5	58.9
02:00 AM - 03:00 AM	58.8	67.0	57.1
03:00 AM - 04:00 AM	59.8	64.5	57.0
04:00 AM - 05:00 AM	58.0	65.7	56.5
05:00 AM - 06:00 AM	58.1	70.4	56.7
06:00 AM - 07:00 AM	59.8	83.4	57.2
07:00 AM - 08:00 AM	59.3	74.9	57.5
08:00 AM - 09:00 AM	59.4	74.5	58.1
09:00 AM - 10:00 AM	58.8	75.7	57.2

Leq Average 24 hrs. (dB(A))	61.0		
Lmax (dB(A))		83.4	
L90 (dB(A))			57.0
Ldn (dB(A))	69.1		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293107
Date Received : Aug 23, 2022
Date Reported : Aug 26, 2022
Report Number: 2414136-1

Page 1 of 1

Sample Number	2293107-2
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงไฟฟ้าเดิม (GPS 47P 0731886, 1402471)
Measurement Date	Aug 16 - Aug 17, 2022
Measurement by	Satcha Phetsawaeng
Sound Level meter	Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.0	81.2	56.7
11:00 AM - 12:00 PM	57.8	80.8	56.4
12:00 PM - 01:00 PM	57.2	70.2	56.1
01:00 PM - 02:00 PM	58.1	65.8	56.6
02:00 PM - 03:00 PM	58.8	74.7	57.2
03:00 PM - 04:00 PM	59.2	69.3	57.9
04:00 PM - 05:00 PM	58.7	84.2	57.3
05:00 PM - 06:00 PM	58.1	77.1	57.1
06:00 PM - 07:00 PM	58.2	69.0	57.3
07:00 PM - 08:00 PM	59.1	67.6	57.6
08:00 PM - 09:00 PM	61.1	76.3	58.1
09:00 PM - 10:00 PM	62.3	70.0	58.5
10:00 PM - 11:00 PM	68.7	73.7	66.8
11:00 PM - 12:00 AM	69.6	74.6	67.7
12:00 AM - 01:00 AM	68.5	74.2	59.1
01:00 AM - 02:00 AM	64.4	71.6	57.4
02:00 AM - 03:00 AM	60.0	68.8	56.9
03:00 AM - 04:00 AM	58.3	64.1	56.4
04:00 AM - 05:00 AM	58.0	64.2	56.4
05:00 AM - 06:00 AM	58.0	69.9	56.3
06:00 AM - 07:00 AM	58.3	69.2	56.6
07:00 AM - 08:00 AM	58.9	69.8	57.2
08:00 AM - 09:00 AM	58.9	76.3	57.3
09:00 AM - 10:00 AM	62.6	83.9	58.3

Leq Average 24 hrs. (dB(A))	62.6		
Lmax (dB(A))		84.2	
L90 (dB(A))			57.2
Ldn (dB(A))	71.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293107

Date Received : Aug 23, 2022

Date Reported : Aug 26, 2022

Report Number: 2414137-1

Page 1 of 1

Sample Number	2293107-3
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงไฟฟ้าเดิม (GPS 47P 0731886, 1402471)
Measurement Date	Aug 17 - Aug 18, 2022
Measurement by	Satcha Phetsawaeng
Sound Level meter	Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.1	86.1	56.6
11:00 AM - 12:00 PM	58.3	76.0	56.3
12:00 PM - 01:00 PM	57.8	74.4	56.5
01:00 PM - 02:00 PM	58.3	64.5	56.7
02:00 PM - 03:00 PM	57.6	69.6	56.0
03:00 PM - 04:00 PM	58.7	68.9	56.7
04:00 PM - 05:00 PM	58.9	79.8	57.1
05:00 PM - 06:00 PM	57.8	70.3	56.3
06:00 PM - 07:00 PM	57.9	70.8	56.4
07:00 PM - 08:00 PM	57.4	69.7	56.3
08:00 PM - 09:00 PM	57.4	66.3	56.2
09:00 PM - 10:00 PM	58.5	67.3	56.4
10:00 PM - 11:00 PM	61.2	69.0	56.6
11:00 PM - 12:00 AM	65.7	70.7	63.5
12:00 AM - 01:00 AM	64.2	70.0	58.5
01:00 AM - 02:00 AM	59.9	68.8	56.6
02:00 AM - 03:00 AM	57.4	65.3	56.2
03:00 AM - 04:00 AM	57.0	61.5	55.9
04:00 AM - 05:00 AM	57.5	62.2	56.1
05:00 AM - 06:00 AM	57.6	63.9	55.9
06:00 AM - 07:00 AM	57.9	64.2	56.2
07:00 AM - 08:00 AM	58.5	71.8	56.8
08:00 AM - 09:00 AM	58.3	75.7	56.8
09:00 AM - 10:00 AM	58.7	73.7	57.1

Leq Average 24 hrs. (dB(A))	59.6		
Lmax (dB(A))		86.1	
L90 (dB(A))			56.4
Ldn (dB(A))	67.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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19517-21/ EMAIL



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293107

Date Received : Aug 23, 2022

Date Reported : Aug 26, 2022

Report Number: 2414138-1

Page 1 of 1

Sample Number	2293107-4
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงไฟฟ้าเดิม (GPS 47P 0731886, 1402471)
Measurement Date	Aug 18 - Aug 19, 2022
Measurement by	Satcha Phetsawaeng
Sound Level meter	Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.8	80.6	57.4
11:00 AM - 12:00 PM	59.6	73.9	56.8
12:00 PM - 01:00 PM	58.2	72.3	56.2
01:00 PM - 02:00 PM	57.2	72.7	55.5
02:00 PM - 03:00 PM	57.1	79.6	55.5
03:00 PM - 04:00 PM	57.4	77.7	56.0
04:00 PM - 05:00 PM	57.4	69.1	55.8
05:00 PM - 06:00 PM	57.4	68.7	56.0
06:00 PM - 07:00 PM	57.5	72.4	56.0
07:00 PM - 08:00 PM	57.8	67.0	55.9
08:00 PM - 09:00 PM	58.3	67.4	56.1
09:00 PM - 10:00 PM	59.0	69.8	56.5
10:00 PM - 11:00 PM	59.9	69.0	56.8
11:00 PM - 12:00 AM	63.4	70.5	57.3
12:00 AM - 01:00 AM	62.2	68.9	56.8
01:00 AM - 02:00 AM	57.9	72.6	56.2
02:00 AM - 03:00 AM	56.9	63.9	55.5
03:00 AM - 04:00 AM	56.6	61.8	55.3
04:00 AM - 05:00 AM	57.1	83.0	55.3
05:00 AM - 06:00 AM	56.2	60.4	55.1
06:00 AM - 07:00 AM	57.1	68.4	55.8
07:00 AM - 08:00 AM	57.9	73.6	56.6
08:00 AM - 09:00 AM	58.1	79.0	56.2
09:00 AM - 10:00 AM	57.5	69.5	56.0

Leq Average 24 hrs. (dB(A))	58.7		
Lmax (dB(A))		83.0	
L90 (dB(A))			56.0
Ldn (dB(A))	65.7		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293107

Date Received : Aug 23, 2022

Date Reported : Aug 26, 2022

Report Number: 2414139-1

Page 1 of 1

Sample Number	2293107-5
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงไฟฟ้าเดิน (GPS 47P 0731886, 1402471)
Measurement Date	Aug 19 - Aug 20, 2022
Measurement by	Satcha Phetsawaeng
Sound Level meter	Serial No. 734220

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	59.5	86.8	55.9
11:00 AM - 12:00 PM	57.4	76.8	55.3
12:00 PM - 01:00 PM	56.6	67.2	55.1
01:00 PM - 02:00 PM	57.2	74.9	55.1
02:00 PM - 03:00 PM	57.8	76.6	56.2
03:00 PM - 04:00 PM	57.3	71.3	56.0
04:00 PM - 05:00 PM	57.2	70.8	56.0
05:00 PM - 06:00 PM	57.2	76.4	55.8
06:00 PM - 07:00 PM	57.1	72.9	55.9
07:00 PM - 08:00 PM	57.1	68.8	56.2
08:00 PM - 09:00 PM	57.5	64.2	56.5
09:00 PM - 10:00 PM	57.7	72.4	56.4
10:00 PM - 11:00 PM	57.5	65.4	56.5
11:00 PM - 12:00 AM	57.4	65.1	56.6
12:00 AM - 01:00 AM	57.9	62.8	56.4
01:00 AM - 02:00 AM	58.3	62.6	56.6
02:00 AM - 03:00 AM	57.6	61.9	56.2
03:00 AM - 04:00 AM	58.1	62.6	56.5
04:00 AM - 05:00 AM	58.4	62.5	56.9
05:00 AM - 06:00 AM	58.3	64.8	56.8
06:00 AM - 07:00 AM	58.6	64.3	57.0
07:00 AM - 08:00 AM	58.3	70.8	56.7
08:00 AM - 09:00 AM	58.0	69.4	56.5
09:00 AM - 10:00 AM	58.7	69.8	57.0

Leq Average 24 hrs. (dB(A))	57.8		
Lmax (dB(A))		86.8	
L90 (dB(A))			56.4
Ldn (dB(A))	64.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise.rpt (3:10PM)



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293107

Date Received : Aug 23, 2022

Date Reported : Aug 26, 2022

Report Number: 2414140-1

Page 1 of 1

Sample Number	2293107-6
Parameter	Noise (Leq 24 hrs.)
Location	บ้านหนองพัน (GPS 47P 0729893, 1403292)
Measurement Date	Aug 15 - Aug 16, 2022
Measurement by	Satcha Phetsawaeng
Sound Level meter	Serial No. 1073608

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.9	78.5	50.0
11:00 AM - 12:00 PM	60.6	86.0	51.5
12:00 PM - 01:00 PM	56.9	74.8	49.9
01:00 PM - 02:00 PM	56.4	77.4	49.6
02:00 PM - 03:00 PM	57.2	75.2	51.5
03:00 PM - 04:00 PM	60.8	70.3	57.9
04:00 PM - 05:00 PM	65.2	83.7	57.1
05:00 PM - 06:00 PM	57.6	74.7	51.6
06:00 PM - 07:00 PM	55.5	76.4	50.6
07:00 PM - 08:00 PM	55.1	77.8	51.2
08:00 PM - 09:00 PM	54.7	71.5	49.4
09:00 PM - 10:00 PM	53.8	76.7	48.3
10:00 PM - 11:00 PM	54.1	72.7	46.9
11:00 PM - 12:00 AM	51.9	68.8	46.9
12:00 AM - 01:00 AM	55.5	82.3	48.2
01:00 AM - 02:00 AM	58.5	76.4	52.7
02:00 AM - 03:00 AM	58.8	78.7	51.5
03:00 AM - 04:00 AM	56.6	74.9	50.7
04:00 AM - 05:00 AM	58.2	79.7	51.5
05:00 AM - 06:00 AM	56.5	76.1	50.9
06:00 AM - 07:00 AM	59.5	75.0	53.4
07:00 AM - 08:00 AM	56.4	74.2	51.2
08:00 AM - 09:00 AM	56.1	75.6	49.4
09:00 AM - 10:00 AM	55.0	85.7	49.4

Leq Average 24 hrs. (dB(A))	58.0		
Lmax (dB(A))		86.0	
L90 (dB(A))			50.7
Ldn (dB(A))	63.8		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supt S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise.rpt (3:10PM)



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293107

Date Received : Aug 23, 2022

Date Reported : Aug 26, 2022

Report Number: 2414141-1

Page 1 of 1

Sample Number 2293107-7
Parameter Noise (Leq 24 hrs.)
Location บ้านหนองพูน (GPS 47P 0729893, 1403292)
Measurement Date Aug 16 - Aug 17, 2022
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1073608

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.8	79.0	50.2
11:00 AM - 12:00 PM	61.4	83.9	52.5
12:00 PM - 01:00 PM	57.5	75.9	51.1
01:00 PM - 02:00 PM	57.3	80.3	49.7
02:00 PM - 03:00 PM	55.2	77.2	48.6
03:00 PM - 04:00 PM	55.1	76.2	48.6
04:00 PM - 05:00 PM	55.4	78.7	47.5
05:00 PM - 06:00 PM	52.7	76.9	46.1
06:00 PM - 07:00 PM	50.3	70.5	45.5
07:00 PM - 08:00 PM	53.1	74.7	44.9
08:00 PM - 09:00 PM	53.4	76.1	44.9
09:00 PM - 10:00 PM	55.5	77.1	47.5
10:00 PM - 11:00 PM	55.5	75.7	47.5
11:00 PM - 12:00 AM	52.5	67.2	45.9
12:00 AM - 01:00 AM	56.3	78.3	49.7
01:00 AM - 02:00 AM	59.1	77.0	54.3
02:00 AM - 03:00 AM	58.7	84.1	52.6
03:00 AM - 04:00 AM	55.4	72.7	50.0
04:00 AM - 05:00 AM	56.7	80.1	50.5
05:00 AM - 06:00 AM	56.2	73.4	50.4
06:00 AM - 07:00 AM	58.6	79.1	52.5
07:00 AM - 08:00 AM	56.9	72.4	51.3
08:00 AM - 09:00 AM	59.1	75.5	51.5
09:00 AM - 10:00 AM	60.4	75.8	53.2

Leq Average 24 hrs. (dB(A)) 57.0

Lmax (dB(A)) 84.1

L90 (dB(A)) 49.7

Ldn (dB(A)) 63.4

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293107

Date Received : Aug 23, 2022

Date Reported : Aug 26, 2022

Report Number: 2414142-1

Page 1 of 1

Sample Number 2293107-8
Parameter Noise (Leq 24 hrs.)
Location บ้านหนองพูน (GPS 47P 0729893, 1403292)
Measurement Date Aug 17 - Aug 18, 2022
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 1073608

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.1	74.3	52.5
11:00 AM - 12:00 PM	61.7	84.4	53.4
12:00 PM - 01:00 PM	58.6	81.1	52.3
01:00 PM - 02:00 PM	56.7	72.9	50.4
02:00 PM - 03:00 PM	55.0	79.0	48.4
03:00 PM - 04:00 PM	53.4	74.1	46.8
04:00 PM - 05:00 PM	57.6	76.5	47.5
05:00 PM - 06:00 PM	54.9	76.9	46.2
06:00 PM - 07:00 PM	53.9	75.0	44.9
07:00 PM - 08:00 PM	53.1	73.9	44.9
08:00 PM - 09:00 PM	52.8	74.3	44.1
09:00 PM - 10:00 PM	51.7	78.3	44.5
10:00 PM - 11:00 PM	51.0	76.1	44.1
11:00 PM - 12:00 AM	50.8	76.1	44.8
12:00 AM - 01:00 AM	54.2	70.0	47.9
01:00 AM - 02:00 AM	58.7	81.6	52.8
02:00 AM - 03:00 AM	59.1	80.4	52.3
03:00 AM - 04:00 AM	57.5	76.3	52.3
04:00 AM - 05:00 AM	57.0	76.6	51.3
05:00 AM - 06:00 AM	56.7	73.8	51.4
06:00 AM - 07:00 AM	57.6	74.8	52.4
07:00 AM - 08:00 AM	55.9	75.5	50.9
08:00 AM - 09:00 AM	55.5	70.3	51.4
09:00 AM - 10:00 AM	55.9	80.5	51.5

Leq Average 24 hrs. (dB(A)) 56.5

Lmax (dB(A)) 84.4

L90 (dB(A)) 50.4

Ldn (dB(A)) 63.0

Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293107

Date Received : Aug 23, 2022

Date Reported : Aug 26, 2022

Report Number: 2414143-1

Page 1 of 1

Sample Number : 2293107-9
Parameter : Noise (Leq 24 hrs.)
Location : บ้านหนองพูน (GPS 47P 0729893, 1403292)
Measurement Date : Aug 18 - Aug 19, 2022
Measurement by : Satcha Phetsawaeng
Sound Level meter : Serial No. 1073608

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	57.5	79.0	52.4
11:00 AM - 12:00 PM	59.1	78.6	50.9
12:00 PM - 01:00 PM	57.3	79.8	50.5
01:00 PM - 02:00 PM	57.4	83.0	48.9
02:00 PM - 03:00 PM	55.9	82.6	47.3
03:00 PM - 04:00 PM	51.1	74.7	45.3
04:00 PM - 05:00 PM	54.1	83.0	45.4
05:00 PM - 06:00 PM	52.7	78.4	44.8
06:00 PM - 07:00 PM	53.2	76.2	44.2
07:00 PM - 08:00 PM	51.8	75.0	44.2
08:00 PM - 09:00 PM	51.9	70.4	44.6
09:00 PM - 10:00 PM	50.7	70.8	44.5
10:00 PM - 11:00 PM	51.2	76.3	44.1
11:00 PM - 12:00 AM	49.4	70.2	44.4
12:00 AM - 01:00 AM	55.3	79.4	48.4
01:00 AM - 02:00 AM	58.2	79.2	52.0
02:00 AM - 03:00 AM	59.2	76.7	53.4
03:00 AM - 04:00 AM	58.3	78.4	51.7
04:00 AM - 05:00 AM	56.9	74.6	50.3
05:00 AM - 06:00 AM	58.2	72.0	52.4
06:00 AM - 07:00 AM	59.3	74.6	55.7
07:00 AM - 08:00 AM	57.9	75.1	52.1
08:00 AM - 09:00 AM	56.4	76.2	49.7
09:00 AM - 10:00 AM	55.9	80.0	50.8

Leq Average 24 hrs. (dB(A)) : 56.3
Lmax (dB(A)) : 83.0
L90 (dB(A)) : 48.9
Ldn (dB(A)) : 63.4
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise.rpt (3:10PM)



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293107

Date Received : Aug 23, 2022

Date Reported : Aug 26, 2022

Report Number: 2414144-1

Page 1 of 1

Sample Number : 2293107-10
Parameter : Noise (Leq 24 hrs.)
Location : บ้านหนองพูน (GPS 47P 0729893, 1403292)
Measurement Date : Aug 19 - Aug 20, 2022
Measurement by : Satcha Phetsawaeng
Sound Level meter : Serial No. 1073608

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	57.2	79.3	51.6
11:00 AM - 12:00 PM	65.7	81.6	54.2
12:00 PM - 01:00 PM	66.6	82.9	51.4
01:00 PM - 02:00 PM	57.4	75.4	50.5
02:00 PM - 03:00 PM	56.4	74.4	50.0
03:00 PM - 04:00 PM	54.5	75.5	46.6
04:00 PM - 05:00 PM	55.7	85.0	46.9
05:00 PM - 06:00 PM	52.8	76.1	46.0
06:00 PM - 07:00 PM	52.2	76.6	45.3
07:00 PM - 08:00 PM	51.8	81.8	44.6
08:00 PM - 09:00 PM	48.2	70.2	44.6
09:00 PM - 10:00 PM	48.0	69.7	44.6
10:00 PM - 11:00 PM	50.9	74.9	44.3
11:00 PM - 12:00 AM	49.3	70.9	44.6
12:00 AM - 01:00 AM	67.5	82.0	47.7
01:00 AM - 02:00 AM	69.5	81.3	58.5
02:00 AM - 03:00 AM	63.7	79.3	53.2
03:00 AM - 04:00 AM	59.6	81.6	52.2
04:00 AM - 05:00 AM	56.9	76.8	50.1
05:00 AM - 06:00 AM	56.7	77.0	50.5
06:00 AM - 07:00 AM	57.5	74.7	52.3
07:00 AM - 08:00 AM	55.8	75.4	50.8
08:00 AM - 09:00 AM	55.4	70.2	51.3
09:00 AM - 10:00 AM	55.8	80.4	51.4

Leq Average 24 hrs. (dB(A)) : 61.2
Lmax (dB(A)) : 85.0
L90 (dB(A)) : 50.1
Ldn (dB(A)) : 69.4
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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S:\Reports_Air Noise.rpt (3:12PM)



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132718

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496107-1

Page 1 of 1

Sample Number	22132718-1
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงไฟฟ้าเดิม (GPS 47P 0731886, 1402471)
Measurement Date	Nov 07 - Nov 08, 2022
Measurement by	Jakkarin Manwicha
Sound Level meter	Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	58.3	73.2	56.2
11:00 AM - 12:00 PM	56.7	64.9	56.0
12:00 PM - 01:00 PM	57.2	70.3	56.2
01:00 PM - 02:00 PM	57.6	69.6	56.7
02:00 PM - 03:00 PM	57.1	64.0	56.3
03:00 PM - 04:00 PM	61.1	69.4	56.5
04:00 PM - 05:00 PM	68.0	71.1	63.7
05:00 PM - 06:00 PM	65.4	70.4	59.8
06:00 PM - 07:00 PM	62.7	70.7	58.1
07:00 PM - 08:00 PM	59.9	69.3	57.0
08:00 PM - 09:00 PM	58.5	66.6	56.7
09:00 PM - 10:00 PM	57.7	62.2	56.8
10:00 PM - 11:00 PM	57.7	60.2	56.8
11:00 PM - 12:00 AM	57.7	60.6	56.8
12:00 AM - 01:00 AM	57.7	63.7	56.7
01:00 AM - 02:00 AM	58.8	72.8	57.1
02:00 AM - 03:00 AM	58.2	66.5	57.1
03:00 AM - 04:00 AM	58.6	74.3	56.9
04:00 AM - 05:00 AM	59.1	71.0	56.8
05:00 AM - 06:00 AM	57.5	70.2	56.3
06:00 AM - 07:00 AM	57.4	71.3	55.6
07:00 AM - 08:00 AM	56.6	74.0	55.4
08:00 AM - 09:00 AM	56.4	71.6	55.5
09:00 AM - 10:00 AM	56.7	67.6	55.6

Leq Average 24 hrs. (dB(A))	60.2	
Lmax (dB(A))		74.3
L90 (dB(A))		56.7
Ldn (dB(A))	65.1	
Standard (dB(A))	70	115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132718

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496108-1

Page 1 of 1

Sample Number	22132718-2
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงไฟฟ้าเดิม (GPS 47P 0731886, 1402471)
Measurement Date	Nov 08 - Nov 09, 2022
Measurement by	Jakkarin Manwicha
Sound Level meter	Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	56.1	70.2	55.4
11:00 AM - 12:00 PM	58.8	80.9	55.6
12:00 PM - 01:00 PM	57.5	69.5	55.9
01:00 PM - 02:00 PM	56.9	62.2	56.2
02:00 PM - 03:00 PM	57.6	64.2	56.1
03:00 PM - 04:00 PM	61.3	69.5	56.4
04:00 PM - 05:00 PM	62.2	70.1	57.9
05:00 PM - 06:00 PM	61.0	67.1	58.1
06:00 PM - 07:00 PM	58.8	65.0	57.0
07:00 PM - 08:00 PM	57.4	59.8	56.7
08:00 PM - 09:00 PM	56.9	59.9	56.3
09:00 PM - 10:00 PM	56.8	58.6	56.3
10:00 PM - 11:00 PM	56.8	58.9	56.3
11:00 PM - 12:00 AM	57.0	59.8	56.5
12:00 AM - 01:00 AM	57.2	60.5	56.6
01:00 AM - 02:00 AM	58.5	78.1	57.0
02:00 AM - 03:00 AM	58.2	69.5	57.0
03:00 AM - 04:00 AM	59.0	70.3	57.4
04:00 AM - 05:00 AM	58.9	74.0	56.6
05:00 AM - 06:00 AM	61.4	67.7	56.4
06:00 AM - 07:00 AM	57.7	69.0	56.3
07:00 AM - 08:00 AM	56.2	69.1	55.1
08:00 AM - 09:00 AM	56.7	74.7	55.1
09:00 AM - 10:00 AM	57.4	74.8	55.4

Leq Average 24 hrs. (dB(A))	58.5	
Lmax (dB(A))		80.9
L90 (dB(A))		56.3
Ldn (dB(A))	64.9	
Standard (dB(A))	70	115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132718

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496109-1

Page 1 of 1

Sample Number	22132718-3
Parameter	Noise (Leq 24 hrs.)
Location	ชั้นหัวหน้าโรงไฟฟ้าเดิม (GPS 47P 0731886, 1402471)
Measurement Date	Nov 09 - Nov 10, 2022
Measurement by	Jakkarin Manwicha
Sound Level meter	Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	57.5	69.9	56.1
11:00 AM - 12:00 PM	58.0	67.5	56.1
12:00 PM - 01:00 PM	57.6	68.7	55.9
01:00 PM - 02:00 PM	56.6	65.8	55.9
02:00 PM - 03:00 PM	56.6	70.4	56.0
03:00 PM - 04:00 PM	56.8	66.9	56.0
04:00 PM - 05:00 PM	57.5	62.9	56.5
05:00 PM - 06:00 PM	58.1	62.8	57.0
06:00 PM - 07:00 PM	57.5	63.5	56.5
07:00 PM - 08:00 PM	57.1	65.8	56.4
08:00 PM - 09:00 PM	56.8	58.8	56.3
09:00 PM - 10:00 PM	56.7	59.5	56.1
10:00 PM - 11:00 PM	56.7	59.6	56.1
11:00 PM - 12:00 AM	56.8	59.2	56.2
12:00 AM - 01:00 AM	57.0	62.3	56.3
01:00 AM - 02:00 AM	58.0	70.1	56.8
02:00 AM - 03:00 AM	58.5	70.3	57.1
03:00 AM - 04:00 AM	60.0	79.9	57.2
04:00 AM - 05:00 AM	60.1	80.9	56.9
05:00 AM - 06:00 AM	56.9	72.4	55.5
06:00 AM - 07:00 AM	56.4	70.6	55.0
07:00 AM - 08:00 AM	55.9	70.2	54.5
08:00 AM - 09:00 AM	56.4	71.1	54.7
09:00 AM - 10:00 AM	57.2	72.7	55.8

Leq Average 24 hrs. (dB(A))

57.5

Lmax (dB(A))

80.9

L90 (dB(A))

56.1

Ldn (dB(A))

64.3

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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19517-21/ EMAIL



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132718

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496110-1

Page 1 of 1

Sample Number	22132718-4
Parameter	Noise (Leq 24 hrs.)
Location	ชั้นหัวหน้าโรงไฟฟ้าเดิม (GPS 47P 0731886, 1402471)
Measurement Date	Nov 10 - Nov 11, 2022
Measurement by	Jakkarin Manwicha
Sound Level meter	Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.1	68.4	59.8
11:00 AM - 12:00 PM	60.4	62.1	59.8
12:00 PM - 01:00 PM	60.5	62.3	60.0
01:00 PM - 02:00 PM	60.8	62.4	60.2
02:00 PM - 03:00 PM	59.9	62.9	59.0
03:00 PM - 04:00 PM	59.9	62.6	59.1
04:00 PM - 05:00 PM	60.4	63.0	60.0
05:00 PM - 06:00 PM	59.3	61.7	58.1
06:00 PM - 07:00 PM	59.4	61.7	58.2
07:00 PM - 08:00 PM	60.4	62.4	60.1
08:00 PM - 09:00 PM	60.6	64.0	60.1
09:00 PM - 10:00 PM	60.8	63.2	60.1
10:00 PM - 11:00 PM	60.6	62.8	60.1
11:00 PM - 12:00 AM	59.2	62.8	58.0
12:00 AM - 01:00 AM	60.7	62.7	60.0
01:00 AM - 02:00 AM	60.5	62.0	60.1
02:00 AM - 03:00 AM	60.5	63.6	60.1
03:00 AM - 04:00 AM	60.5	63.5	60.0
04:00 AM - 05:00 AM	59.8	62.1	59.1
05:00 AM - 06:00 AM	60.5	64.0	59.8
06:00 AM - 07:00 AM	60.3	62.8	59.7
07:00 AM - 08:00 AM	59.9	62.5	59.4
08:00 AM - 09:00 AM	59.5	61.7	59.1
09:00 AM - 10:00 AM	60.2	65.9	59.1

Leq Average 24 hrs. (dB(A))

60.2

Lmax (dB(A))

68.4

L90 (dB(A))

59.8

Ldn (dB(A))

66.7

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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19517-21/ EMAIL



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132718

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496111-1

Page 1 of 1

Sample Number	22132718-5
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงไฟฟ้าเดิม (GPS 47P 0731886, 1402471)
Measurement Date	Nov 11 - Nov 12, 2022
Measurement by	Jakkarin Manwicha
Sound Level meter	Serial No. 734221

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	60.0	65.9	59.5
11:00 AM - 12:00 PM	60.1	62.3	59.6
12:00 PM - 01:00 PM	60.1	63.0	59.7
01:00 PM - 02:00 PM	60.6	62.9	59.9
02:00 PM - 03:00 PM	60.5	62.3	60.1
03:00 PM - 04:00 PM	60.5	62.9	60.0
04:00 PM - 05:00 PM	60.7	63.2	59.9
05:00 PM - 06:00 PM	58.6	60.9	57.8
06:00 PM - 07:00 PM	58.6	63.3	57.7
07:00 PM - 08:00 PM	58.6	61.0	57.7
08:00 PM - 09:00 PM	58.7	61.6	57.7
09:00 PM - 10:00 PM	59.6	62.3	57.7
10:00 PM - 11:00 PM	58.7	61.4	57.8
11:00 PM - 12:00 AM	58.8	61.3	58.0
12:00 AM - 01:00 AM	58.4	59.8	57.8
01:00 AM - 02:00 AM	60.1	62.3	59.1
02:00 AM - 03:00 AM	60.4	62.5	60.0
03:00 AM - 04:00 AM	60.5	62.6	59.9
04:00 AM - 05:00 AM	60.1	61.9	59.8
05:00 AM - 06:00 AM	60.1	62.5	59.6
06:00 AM - 07:00 AM	60.0	62.6	59.5
07:00 AM - 08:00 AM	59.8	64.1	59.3
08:00 AM - 09:00 AM	60.0	62.7	59.5
09:00 AM - 10:00 AM	60.0	62.9	59.4

Leq Average 24 hrs. (dB(A)) 59.8
Lmax (dB(A)) 65.9
L90 (dB(A)) 59.5
Ldn (dB(A)) 66.2
Standard (dB(A)) 70
Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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19517-21/ EMAIL



Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132718

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496112-1

Page 1 of 1

Sample Number	22132718-6
Parameter	Noise (Leq 24 hrs.)
Location	บ้านหนองพูน (GPS 47P 0729893, 1403292)
Measurement Date	Nov 07 - Nov 08, 2022
Measurement by	Jakkarin Manwicha
Sound Level meter	Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	58.6	83.5	52.7
01:00 PM - 02:00 PM	54.9	77.0	51.5
02:00 PM - 03:00 PM	55.0	75.5	49.9
03:00 PM - 04:00 PM	55.6	76.2	50.1
04:00 PM - 05:00 PM	56.1	86.6	50.0
05:00 PM - 06:00 PM	57.1	79.1	50.5
06:00 PM - 07:00 PM	58.5	84.7	50.9
07:00 PM - 08:00 PM	56.5	78.0	50.5
08:00 PM - 09:00 PM	53.8	73.6	49.2
09:00 PM - 10:00 PM	54.6	77.7	50.0
10:00 PM - 11:00 PM	55.0	78.4	50.7
11:00 PM - 12:00 AM	55.1	81.7	51.7
12:00 AM - 01:00 AM	53.9	74.0	51.9
01:00 AM - 02:00 AM	53.5	68.9	51.8
02:00 AM - 03:00 AM	53.8	68.5	52.3
03:00 AM - 04:00 AM	54.3	69.7	52.3
04:00 AM - 05:00 AM	54.3	68.6	52.7
05:00 AM - 06:00 AM	57.6	84.8	53.2
06:00 AM - 07:00 AM	57.9	79.3	54.1
07:00 AM - 08:00 AM	59.3	84.3	55.7
08:00 AM - 09:00 AM	61.1	83.3	55.2
09:00 AM - 10:00 AM	56.7	73.7	53.0
10:00 AM - 11:00 PM	57.8	76.5	53.6
11:00 AM - 12:00 PM	57.3	74.7	53.4

Leq Average 24 hrs. (dB(A)) 56.7
Lmax (dB(A)) 86.6
L90 (dB(A)) 51.8
Ldn (dB(A)) 62.1
Standard (dB(A)) 70
Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132718

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496113-1

Page 1 of 1

Sample Number	22132718-7
Parameter	Noise (Leq 24 hrs.)
Location	บ้านหนองพูน (GPS 47P 0729893, 1403292)
Measurement Date	Nov 08 - Nov 09, 2022
Measurement by	Jakkarin Manwicha
Sound Level meter	Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	60.1	75.6	52.3
01:00 PM - 02:00 PM	55.0	69.9	51.3
02:00 PM - 03:00 PM	55.2	77.7	50.1
03:00 PM - 04:00 PM	55.3	77.6	49.6
04:00 PM - 05:00 PM	56.6	80.3	49.2
05:00 PM - 06:00 PM	60.2	89.6	50.8
06:00 PM - 07:00 PM	58.3	82.9	50.4
07:00 PM - 08:00 PM	57.1	77.6	52.0
08:00 PM - 09:00 PM	56.1	81.0	51.8
09:00 PM - 10:00 PM	54.5	76.7	51.0
10:00 PM - 11:00 PM	55.4	80.1	51.0
11:00 PM - 12:00 AM	55.2	82.9	51.4
12:00 AM - 01:00 AM	53.3	66.0	51.6
01:00 AM - 02:00 AM	52.6	64.8	51.2
02:00 AM - 03:00 AM	53.2	70.1	51.9
03:00 AM - 04:00 AM	53.7	73.8	52.0
04:00 AM - 05:00 AM	54.8	65.5	53.0
05:00 AM - 06:00 AM	55.1	80.2	52.5
06:00 AM - 07:00 AM	58.5	82.4	53.9
07:00 AM - 08:00 AM	60.6	77.5	56.3
08:00 AM - 09:00 AM	66.8	90.1	55.6
09:00 AM - 10:00 AM	58.6	75.2	54.3
10:00 AM - 11:00 AM	59.0	78.5	53.7
11:00 AM - 12:00 PM	57.8	78.4	53.2

Leq Average 24 hrs. (dB(A))	58.3		
Lmax (dB(A))		90.1	
L90 (dB(A))			51.8
Ldn (dB(A))	62.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132718

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496114-1

Page 1 of 1

Sample Number	22132718-8
Parameter	Noise (Leq 24 hrs.)
Location	บ้านหนองพูน (GPS 47P 0729893, 1403292)
Measurement Date	Nov 09 - Nov 10, 2022
Measurement by	Jakkarin Manwicha
Sound Level meter	Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	61.4	80.2	52.6
01:00 PM - 02:00 PM	54.9	72.7	50.2
02:00 PM - 03:00 PM	56.0	78.5	49.2
03:00 PM - 04:00 PM	56.5	82.9	49.1
04:00 PM - 05:00 PM	55.9	72.3	50.1
05:00 PM - 06:00 PM	56.6	75.7	50.3
06:00 PM - 07:00 PM	56.8	82.1	49.7
07:00 PM - 08:00 PM	56.7	80.2	49.3
08:00 PM - 09:00 PM	55.4	78.1	49.1
09:00 PM - 10:00 PM	54.9	80.7	50.1
10:00 PM - 11:00 PM	53.3	72.5	50.3
11:00 PM - 12:00 AM	53.6	77.5	49.8
12:00 AM - 01:00 AM	52.3	69.8	50.1
01:00 AM - 02:00 AM	51.1	63.1	49.7
02:00 AM - 03:00 AM	52.6	61.0	51.2
03:00 AM - 04:00 AM	52.6	68.4	50.7
04:00 AM - 05:00 AM	51.7	70.1	50.1
05:00 AM - 06:00 AM	54.4	82.7	50.8
06:00 AM - 07:00 AM	57.2	81.4	53.0
07:00 AM - 08:00 AM	59.7	77.8	55.5
08:00 AM - 09:00 AM	62.6	82.8	56.2
09:00 AM - 10:00 AM	59.2	79.4	54.7
10:00 AM - 11:00 AM	58.9	72.6	54.3
11:00 AM - 12:00 PM	58.2	77.4	53.8

Leq Average 24 hrs. (dB(A))	57.0		
Lmax (dB(A))		82.9	
L90 (dB(A))			50.2
Ldn (dB(A))	61.0		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132718

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496115-1

Page 1 of 1

Sample Number	22132718-9
Parameter	Noise (Leq 24 hrs.)
Location	บ้านหนองพูน (GPS 47P 0729893, 1403292)
Measurement Date	Nov 10 - Nov 11, 2022
Measurement by	Jakkarin Manwicha
Sound Level meter	Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	60.6	75.6	55.0
01:00 PM - 02:00 PM	57.4	86.0	53.4
02:00 PM - 03:00 PM	57.4	72.1	52.6
03:00 PM - 04:00 PM	55.6	73.7	50.7
04:00 PM - 05:00 PM	57.0	80.9	49.8
05:00 PM - 06:00 PM	56.6	72.4	50.7
06:00 PM - 07:00 PM	57.2	82.6	50.2
07:00 PM - 08:00 PM	60.9	78.8	50.0
08:00 PM - 09:00 PM	58.2	85.5	48.8
09:00 PM - 10:00 PM	54.1	77.9	48.5
10:00 PM - 11:00 PM	54.7	80.9	50.7
11:00 PM - 12:00 AM	54.9	80.8	50.2
12:00 AM - 01:00 AM	55.1	85.0	50.8
01:00 AM - 02:00 AM	53.1	83.5	50.2
02:00 AM - 03:00 AM	52.5	68.6	50.8
03:00 AM - 04:00 AM	53.2	81.1	50.7
04:00 AM - 05:00 AM	52.6	68.2	51.2
05:00 AM - 06:00 AM	52.6	71.5	51.0
06:00 AM - 07:00 AM	55.3	80.3	51.5
07:00 AM - 08:00 AM	57.9	76.6	52.7
08:00 AM - 09:00 AM	59.6	85.2	53.6
09:00 AM - 10:00 AM	56.4	75.2	52.1
10:00 AM - 11:00 AM	56.4	72.1	52.6
11:00 AM - 12:00 PM	57.0	76.1	51.7

Leq Average 24 hrs. (dB(A))	56.8		
Lmax (dB(A))		86.0	
L90 (dB(A))			50.8
Ldn (dB(A))	61.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132718

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496116-1

Page 1 of 1

Sample Number	22132718-10
Parameter	Noise (Leq 24 hrs.)
Location	บ้านหนองพูน (GPS 47P 0729893, 1403292)
Measurement Date	Nov 11 - Nov 12, 2022
Measurement by	Jakkarin Manwicha
Sound Level meter	Serial No. 734218

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	57.4	80.3	52.1
01:00 PM - 02:00 PM	56.2	91.4	51.1
02:00 PM - 03:00 PM	53.3	69.7	48.5
03:00 PM - 04:00 PM	68.3	81.1	50.3
04:00 PM - 05:00 PM	60.1	84.7	50.3
05:00 PM - 06:00 PM	57.4	76.3	51.8
06:00 PM - 07:00 PM	58.2	82.9	52.0
07:00 PM - 08:00 PM	60.4	87.4	51.3
08:00 PM - 09:00 PM	58.6	86.9	51.4
09:00 PM - 10:00 PM	54.0	79.1	50.0
10:00 PM - 11:00 PM	53.9	72.0	50.0
11:00 PM - 12:00 AM	50.9	76.5	47.3
12:00 AM - 01:00 AM	49.8	78.1	46.5
01:00 AM - 02:00 AM	49.3	63.7	47.3
02:00 AM - 03:00 AM	50.6	70.6	46.2
03:00 AM - 04:00 AM	49.8	62.5	46.8
04:00 AM - 05:00 AM	53.0	70.0	51.6
05:00 AM - 06:00 AM	53.3	82.7	50.6
06:00 AM - 07:00 AM	57.9	83.3	51.2
07:00 AM - 08:00 AM	56.8	76.3	52.0
08:00 AM - 09:00 AM	58.1	81.7	52.1
09:00 AM - 10:00 AM	58.7	87.4	52.3
10:00 AM - 11:00 AM	57.5	79.7	52.3
11:00 AM - 12:00 PM	56.3	75.0	52.0

Leq Average 24 hrs. (dB(A))	58.5		
Lmax (dB(A))		91.4	
L90 (dB(A))			51.1
Ldn (dB(A))	61.4		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

Remark : The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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ภาคผนวก ค-5

คุณภาพน้ำทิ้ง (น้ำจืด)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2285549

TESTING
No.0042
Date Received : Jul 20, 2022
Date Reported : Jul 27, 2022
Report Number : 2372455-1

Page 1 of 1

Sample Number	2285549-1
Sampled Date	Jul 20, 2022 10:20 AM
Sample Description	Wastewater
Location	บ่อกำจัดน้ำทิ้งของโครงการ
Date Analysis Commenced	Jul 20, 2022
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
pH at 25 degree C		-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.7	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	868	≤3000	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor
โทรศัพท์มือถือ 09-323-09445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์มือถือ 09-323-09442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2285549

Date Received : Jul 20, 2022
Date Reported : Jul 27, 2022
Report Number : 2372455-2

Page 1 of 1

Sample Number	2285549-1
Sampled Date	Jul 20, 2022 10:20 AM
Sample Description	Wastewater
Location	บ่อกำจัดน้ำทิ้งของโครงการ
Date Analysis Commenced	Jul 21, 2022
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen	mg/L	-	0.1	7.3	No Standard	Based on APHA (2017), 4500-O(C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Sampled By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banphit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

TESTING
No.0042

Lot ID: 2293918

Date Received : Aug 17, 2022

Date Reported : Aug 24, 2022

Report Number : 2390681-1

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Sample Number	2293918-1
Sampled Date	Aug 17, 2022 1:52 PM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโครงการ
Date Analysis Commenced	Aug 17, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
pH at 25 degree C		-	-	8.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	33.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	940	(1)	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banongkit

Narumon Banongkit
Supervisor
โทรศัพท์ 3-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

โทรศัพท์ 3-323-9-9442

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Analysis / Test Report

Lot ID: 2293918

Date Received : Aug 17, 2022

Date Reported : Aug 24, 2022

Report Number : 2390681-2

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Sample Number	2293918-1
Sampled Date	Aug 17, 2022 1:52 PM
Sample Description	Wastewater
Location	น้ำพักน้ำทิ้งของโครงการ
Date Analysis Commenced	Aug 18, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen	mg/L	-	0.1	7.7	No Standard	Based on APHA (2017), 4500-O(C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 22108102
Date Received : Sep 28, 2022
Date Reported : Oct 04, 2022
Report Number : 2420848-1

Page 1 of 1

Sample Number	22108102-1						
Sampled Date	Sep 28, 2022 10:30 AM						
Sample Description	Wastewater						
Location	บ่อพักน้ำทิ้งของโครงการ						
Date Analysis Commenced	Sep 28, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
pH at 25 degree C		-	-	8.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1080	(1)	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor
โทรศัพท์ ๖-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22108102
Date Received : Sep 28, 2022
Date Reported : Oct 04, 2022
Report Number : 2420848-2

Page 1 of 1

Sample Number	22108102-1						
Sampled Date	Sep 28, 2022 10:30 AM						
Sample Description	Wastewater						
Location	บ่อพักน้ำทิ้งของโครงการ						
Date Analysis Commenced	Sep 30, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen	mg/L	-	0.1	7.3	No Standard	Based on APHA (2017), 4500-O(C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 22114784
Date Received : Oct 19, 2022
Date Reported : Oct 26, 2022
Report Number : 2436424-1

Page 1 of 1

Sample Number	22114784-1
Sampled Date	Oct 19, 2022 11:00 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งของโครงการ
Date Analysis Commenced	Oct 19, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
pH at 25 degree C		-	-	7.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	780	≤39300 (1)	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,300 mg/L (Refer to Lot ID 22127351-1)

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

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Technical Management

N. Banchookit

Narumon Banchookit
Supervisor
โทรศัพท์ 7-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 7-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22114784
Date Received : Oct 19, 2022
Date Reported : Oct 26, 2022
Report Number : 2436424-3

Page 1 of 1

Sample Number	22114784-1
Sampled Date	Oct 19, 2022 11:00 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งของโครงการ
Date Analysis Commenced	Oct 20, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen	mg/L	-	0.1	7.3	No Standard	Based on APHA (2017), 4500-O(C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,300 mg/L (Refer to Lot ID 22127351-1)

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchookit

Narumon Banchookit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0009
Lot ID: 22127243
Date Received : Oct 19, 2022
Date Reported : Oct 31, 2022
Report Number : 2471334-1

Page 1 of 1

Sample Number	22127243-1
Sampled Date	Oct 19, 2022 11:00 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งของโครงการ Holding Pond
Date Analysis Commenced	Oct 20, 2022
Condition of Sample	Contained in four glass vials, two amber glass bottles and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	<0.0005	≤0.25	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	≤0.20	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	0.002	≤0.02	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

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Technical Management

Savitree N.

Savitree Noisangiam
Manager

โทรศัพท์ ๖-204-๖-4709

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager

โทรศัพท์ ๖-204-๖-6111

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0009
Lot ID: 22127243
Date Received : Oct 19, 2022
Date Reported : Nov 01, 2022
Report Number : 2471334-2

Page 1 of 1

Sample Number	22127243-1
Sampled Date	Oct 19, 2022 11:00 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งของโครงการ Holding Pond
Date Analysis Commenced	Oct 20, 2022
Condition of Sample	Contained in four glass vials, two amber glass bottles and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.06	No Standard	Based on APHA (2017), 3125	Bangkok
Petroleum Hydrocarbons							
C10-C14 *	ug/L	-	10	<10	No Standard	Based on US EPA, Method 3510C and 8015B	Bangkok
C15-C28 *	ug/L	-	50	<50	No Standard	Based on US EPA, Method 3510C and 8015B	Bangkok
C29-C36 *	ug/L	-	50	<50	No Standard	Based on US EPA, Method 3510C and 8015B	Bangkok
C6-C9 *	ug/L	-	20	<20	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

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Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

TESTING
No.0042

Lot ID: 22132682

Date Received : Nov 16, 2022

Date Reported : Nov 23, 2022

Report Number : 2478188-1

Page 1 of 1

Sample Number	22132682-1
Sampled Date	Nov 16, 2022 10:20 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งของโครงการ
Date Analysis Commenced	Nov 16, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
pH at 25 degree C		-	-	7.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.4	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	378	≤39750 (1)	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,750 mg/L (Refer to Lot ID 22133182-1)

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

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- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
หมายเลขโทรศัพท์ 3-323-9-9445

Approved by

D. Chongchon

Dej Changchon
Senior Manager
หมายเลขโทรศัพท์ 3-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132682

Date Received : Nov 16, 2022

Date Reported : Nov 23, 2022

Report Number : 2478188-3

Page 1 of 1

Sample Number	22132682-1
Sampled Date	Nov 16, 2022 10:20 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งของโครงการ
Date Analysis Commenced	Nov 18, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen	mg/L	-	0.1	7.6	No Standard	Based on APHA (2017), 4500-O(C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,750 mg/L (Refer to Lot ID 22133182-1)

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 22146852
Date Received : Dec 21, 2022
Date Reported : Dec 28, 2022
Report Number : 2511851-1

Page 1 of 1

Sample Number	22146852-1
Sampled Date	Dec 21, 2022 9:50 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งของโครงการ
Date Analysis Commenced	Dec 21, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
pH at 25 degree C *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	27.9	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	392	≤37800 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,800 mg/L (Refer to Lot ID 22146004-1)

Sampling By : Paramet Sattayakun ระเบียบเลขที่ ๖-323-๖-9476 , Panupong Manit ระเบียบเลขที่ ๖-204-๖-8600

Remark :

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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor

ระเบียบเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ระเบียบเลขที่ ๖-323-๖-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22146852
Date Received : Dec 21, 2022
Date Reported : Dec 28, 2022
Report Number : 2511851-3

Page 1 of 1

Sample Number	22146852-1
Sampled Date	Dec 21, 2022 9:50 AM
Sample Description	Wastewater
Location	บ่อกักน้ำทิ้งของโครงการ
Date Analysis Commenced	Dec 22, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Dissolved Oxygen	mg/L	-	0.1	8.0	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,800 mg/L (Refer to Lot ID 22146004-1)

Sampling By : Paramet Sattayakun ระเบียบเลขที่ ๖-323-๖-9476 , Panupong Manit ระเบียบเลขที่ ๖-204-๖-8600

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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บ่อพักน้ำชะจากลานกองถ่านหิน



Analysis / Test Report



TESTING
No.0009

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22127243
Date Received : Oct 19, 2022
Date Reported : Oct 31, 2022
Report Number : 2471335-1

Page 1 of 1

Sample Number	22127243-2
Sampled Date	Oct 19, 2022 12:38 PM
Sample Description	Wastewater
Location	บ่อกักเก็บน้ำชะจากหลุมฝังกลบ ด่านหิน
Date Analysis Commenced	Oct 20, 2022
Condition of Sample	Contained in four glass vials, two amber glass bottles and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Arsenic	mg/L	0.0003	0.0005	<0.0005	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.0003	0.0005	Not Detected	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0005	Based on APHA (2017), 3125	Bangkok

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

Sawitree N.
Sawitree Noisangiam
Manager
โทรศัพท์ ๖-204-๖-4709

Approved by

Kanokkorn Anek
Kanokkorn Anek
Senior Manager
โทรศัพท์ ๖-204-๖-6111

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Analysis / Test Report



TESTING
No.0009

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22127243
Date Received : Oct 19, 2022
Date Reported : Nov 01, 2022
Report Number : 2471335-2

Page 1 of 1

Sample Number	22127243-2
Sampled Date	Oct 19, 2022 12:38 PM
Sample Description	Wastewater
Location	บ่อกักเก็บน้ำชะจากหลุมฝังกลบ ด่านหิน
Date Analysis Commenced	Oct 20, 2022
Condition of Sample	Contained in four glass vials, two amber glass bottles and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Metals Testing						
Iron	mg/L	0.003	0.005	0.06	Based on APHA (2017), 3125	Bangkok
Petroleum Hydrocarbons						
C10-C14 *	ug/L	-	10	<10	Based on US EPA, Method 3510C and 8015B	Bangkok
C15-C28 *	ug/L	-	50	<50	Based on US EPA, Method 3510C and 8015B	Bangkok
C29-C36 *	ug/L	-	50	<50	Based on US EPA, Method 3510C and 8015B	Bangkok
C6-C9 *	ug/L	-	20	<20	Based on US EPA, Method 5030B and 8260D	Bangkok

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Approved by

Siriluk P.
Siriluk Puengpang
Supervisor

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น้ำทิ้งที่ผ่านระบบบำบัดน้ำชะจากลานกองถ่านหิน



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: GHECO-ONE



TESTING
No.0009

Lot ID: 22127243
Date Received : Oct 19, 2022
Date Reported : Oct 31, 2022
Report Number : 2471336-1

Page 1 of 1

Sample Number	22127243-3						
Sampled Date	Oct 19, 2022 12:30 PM						
Sample Description	Wastewater						
Location	น้ำทิ้งที่ผ่านระบบบำบัดน้ำจากลานกองถ่านหิน						
Date Analysis Commenced	Oct 20, 2022						
Condition of Sample	Contained in four glass vials, two amber glass bottles and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.0003	0.0005	<0.0005	≤0.25	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0003	0.0005	Not Detected	≤0.03	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.0003	0.0005	<0.0005	≤0.20	Based on APHA (2017), 3125	Bangkok
Mercury *	mg/L	0.0001	0.0005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.0003	0.0005	0.0006	≤0.02	Based on APHA (2017), 3125	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :
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Technical Management

Sawitree N.

Sawitree Noisangiam
Manager

เบอร์โทรเลขที่ 2-204-2-4709

Approved by

Kanokkorn Anek

Kanokkorn Anek
Senior Manager

เบอร์โทรเลขที่ 2-204-2-6111

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location: GHECO-ONE



TESTING
No.0009

Lot ID: 22127243
Date Received : Oct 19, 2022
Date Reported : Nov 01, 2022
Report Number : 2471336-2

Page 1 of 1

Sample Number	22127243-3						
Sampled Date	Oct 19, 2022 12:30 PM						
Sample Description	Wastewater						
Location	น้ำทิ้งที่ผ่านระบบบำบัดน้ำจากลานกองถ่านหิน						
Date Analysis Commenced	Oct 20, 2022						
Condition of Sample	Contained in four glass vials, two amber glass bottles and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.03	No Standard	Based on APHA (2017), 3125	Bangkok
Petroleum Hydrocarbons							
C10-C14 *	ug/L	-	10	<10	No Standard	Based on US EPA, Method 3510C and 8015B	Bangkok
C15-C28 *	ug/L	-	50	<50	No Standard	Based on US EPA, Method 3510C and 8015B	Bangkok
C29-C36 *	ug/L	-	50	<50	No Standard	Based on US EPA, Method 3510C and 8015B	Bangkok
C6-C9 *	ug/L	-	20	<20	No Standard	Based on US EPA, Method 5030B and 8260D	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :
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Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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ภาคผนวก ค-6

คุณภาพน้ำทิ้ง (น้ำทะเล)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location :



TESTING

No.0042

Lot ID: 2283110

Date Received : Jul 06, 2022

Date Reported : Jul 11, 2022

Report Number : 2366420-1

Page 1 of 1

Sample Number	2283110-1
Sampled Date	Jul 06, 2022 4:10 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Jul 06, 2022
Condition of Sample	Contained in one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	36.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33450	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pitthaya Thongtaeng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor

โทรศัพท์มือถือ 09-323-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

โทรศัพท์มือถือ 09-323-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location :

Lot ID: 2283110

Date Received : Jul 06, 2022

Date Reported : Jul 11, 2022

Report Number : 2366420-2

Page 1 of 1

Sample Number	2283110-1
Sampled Date	Jul 06, 2022 4:10 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Jul 07, 2022
Condition of Sample	Contained in one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47820	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	4.8	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	34.2	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	2.7	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Pitthaya Thongtaeng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 2285260
Date Received : Jul 14, 2022
Date Reported : Jul 19, 2022
Report Number : 2371593-1

Page 1 of 1

Sample Number	2285260-1
Sampled Date	Jul 14, 2022 11:23 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Jul 14, 2022
Condition of Sample	Contained in two plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	32.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	34100	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongsachai

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor
หมายเลขโทรศัพท์ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

หมายเลขโทรศัพท์ ๖-323-๖-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2285260
Date Received : Jul 14, 2022
Date Reported : Jul 19, 2022
Report Number : 2371593-2

Page 1 of 1

Sample Number	2285260-1
Sampled Date	Jul 14, 2022 11:23 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Jul 15, 2022
Condition of Sample	Contained in two plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47130	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.4	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	29.7	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	3.0	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Tanasit Wongsachai

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Sample Number 2285574-1
Sampled Date Jul 20, 2022 4:10 PM
Sample Description Wastewater
Location จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced Jul 21, 2022
Condition of Sample Contained in two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Paramet Sattayakun

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banphat

Narumon Banphongkit
Supervisor
หมายเลขโทรศัพท์ ๖-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
หมายเลขโทรศัพท์ ๖-323-๙-9442

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TESTING
No.0042

Lot ID: 2285574

Date Received : Jul 20, 2022
Date Reported : Jul 27, 2022
Report Number : 2372490-1

Page 1 of 1



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Sample Number 2285564-1
Sampled Date Jul 20, 2022 4:10 PM
Sample Description Wastewater
Location จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced Jul 20, 2022
Condition of Sample Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	33700	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banphat

Narumon Banphongkit
Supervisor
หมายเลขโทรศัพท์ ๖-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
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TESTING
No.0042

Lot ID: 2285564

Date Received : Jul 20, 2022
Date Reported : Jul 25, 2022
Report Number : 2372478-1

Page 1 of 1



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2285564

Date Received : Jul 20, 2022
Date Reported : Jul 25, 2022
Report Number : 2372478-2

Page 1 of 1

Sample Number	2285564-1
Sampled Date	Jul 20, 2022 4:10 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Jul 21, 2022
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48260	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.7	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	30.1	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	3.0	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042

Lot ID: 2285565

Date Received : Jul 27, 2022
Date Reported : Aug 02, 2022
Report Number : 2372473-1

Page 1 of 1

Sample Number	2285565-1
Sampled Date	Jul 27, 2022 11:30 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Jul 27, 2022
Condition of Sample	Contained in two plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	36.2	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	32200	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :
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Technical Management

N. Banchongkit

Narumon Banchongkit
Supervisor

โทรศัพท์ 323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

โทรศัพท์ 323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2285565

Date Received : Jul 27, 2022
Date Reported : Aug 02, 2022
Report Number : 2372473-2

Page 1 of 1

Sample Number	2285565-1
Sampled Date	Jul 27, 2022 11:30 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Jul 29, 2022
Condition of Sample	Contained in two plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	45670	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.0	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	29.1	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	12.3	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchookit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042

Lot ID: 2293982

Date Received : Aug 03, 2022
Date Reported : Aug 10, 2022
Report Number : 2390801-1

Page 1 of 1

Sample Number	2293982-1
Sampled Date	Aug 03, 2022 10:55 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Aug 03, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	30250	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

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Technical Management

N. Banchookit

Narumon Banchongkit
Supervisor

โทรศัพท์ 323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

โทรศัพท์ 323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293982
Date Received : Aug 03, 2022
Date Reported : Aug 10, 2022
Report Number : 2390801-2

Page 1 of 1

Sample Number	2293982-1
Sampled Date	Aug 03, 2022 10:55 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Aug 04, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	44970	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.8	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	28.4	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	1.2	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042

Lot ID: 2294000
Date Received : Aug 10, 2022
Date Reported : Aug 19, 2022
Report Number : 2390817-1

Page 1 of 1

Sample Number	2294000-1
Sampled Date	Aug 10, 2022 11:00 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Aug 10, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	36.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32050	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :
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Technical Management

N. Banongkit

Narumon Banongkit
Supervisor
ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ๖-323-๖-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2294000

Date Received : Aug 10, 2022

Date Reported : Aug 19, 2022

Report Number : 2390817-2

Page 1 of 1

Sample Number	2294000-1
Sampled Date	Aug 10, 2022 11:00 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Aug 11, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46510	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.2	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	28.9	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	0.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchookit

Narumon Banchookit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE



TESTING

No.0042

Lot ID: 2294005

Date Received : Aug 17, 2022

Date Reported : Aug 24, 2022

Report Number : 2390826-1

Page 1 of 1

Sample Number	2294005-1
Sampled Date	Aug 17, 2022 3:15 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Aug 17, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.9	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	32300	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banchookit

Narumon Banchookit
Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2294005

Date Received : Aug 17, 2022
Date Reported : Aug 24, 2022
Report Number : 2390826-2

Page 1 of 1

Sample Number	2294005-1
Sampled Date	Aug 17, 2022 3:15 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Aug 18, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47800	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.6	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	29.8	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	4.1	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042

Lot ID: 2294005

Date Received : Aug 17, 2022
Date Reported : Aug 24, 2022
Report Number : 2390826-3

Page 1 of 1

Sample Number	2294005-1
Sampled Date	Aug 17, 2022 3:15 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Aug 18, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor

หมายเลขโทรศัพท์ 323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

หมายเลขโทรศัพท์ 323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 2294006
Date Received : Aug 24, 2022
Date Reported : Aug 31, 2022
Report Number : 2390823-1

Page 1 of 1

Sample Number	2294006-1						
Sampled Date	Aug 24, 2022 11:00 AM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ						
Date Analysis Commenced	Aug 24, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	35.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C.*	mg/L	-	5	33100	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor

โทรศัพท์ 0-323-0-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

โทรศัพท์ 0-323-0-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2294006
Date Received : Aug 24, 2022
Date Reported : Aug 31, 2022
Report Number : 2390823-2

Page 1 of 1

Sample Number	2294006-1						
Sampled Date	Aug 24, 2022 11:00 AM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ						
Date Analysis Commenced	Aug 25, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47680	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.0	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	30.3	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	8.0	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banphit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 2294007
Date Received : Aug 31, 2022
Date Reported : Sep 07, 2022
Report Number : 2390819-1

Page 1 of 1

Sample Number	2294007-1
Sampled Date	Aug 31, 2022 10:55 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Aug 31, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	35.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	33400	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

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Technical Management

N. Banngmit

Narumon Banchongkit
Supervisor
โทรศัพท์ 7-323-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 7-323-9442

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Client : GHECO-ONE COMPANY LIMITED
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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2294007

Date Received : Aug 31, 2022
Date Reported : Sep 07, 2022
Report Number : 2390819-2

Page 1 of 1

Sample Number	2294007-1
Sampled Date	Aug 31, 2022 10:55 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Sep 01, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46700	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	4.7	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	28.1	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	1.0	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 22108065
Date Received : Sep 07, 2022
Date Reported : Sep 15, 2022
Report Number : 2420810-1

Page 1 of 1

Sample Number	22108065-1
Sampled Date	Sep 07, 2022 11:00 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Sep 07, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32350	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
เบอร์โทร 09-323-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
เบอร์โทร 09-323-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22108065

Date Received : Sep 07, 2022
Date Reported : Sep 15, 2022
Report Number : 2420810-2

Page 1 of 1

Sample Number	22108065-1
Sampled Date	Sep 07, 2022 11:00 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Sep 08, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47120	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.4	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	27.2	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	1.4	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 22108056
Date Received : Sep 14, 2022
Date Reported : Sep 21, 2022
Report Number : 2420797-1

Page 1 of 1

Sample Number	22108056-1
Sampled Date	Sep 14, 2022 10:12 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Sep 14, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	33.1	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	25550	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

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Narumon Banchongkit
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Approved by

D. Changchon

Dej Changchon
Senior Manager
หมายเลขโทรศัพท์ 7-323-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22108056
Date Received : Sep 14, 2022
Date Reported : Sep 21, 2022
Report Number : 2420797-2

Page 1 of 1

Sample Number	22108056-1
Sampled Date	Sep 14, 2022 10:12 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Sep 15, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	37980	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.0	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	22.6	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	2.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 22108064
Date Received : Sep 21, 2022
Date Reported : Sep 29, 2022
Report Number : 2420833-1

Page 1 of 1

Sample Number	22108064-1
Sampled Date	Sep 21, 2022 12:10 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Sep 21, 2022
Condition of Sample	Contained in one BOD bottle, four glass vials, three amber glass bottles and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.8	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30450	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchookit

Narumon Banchongkit
Supervisor
โทรศัพท์ ๖-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22108064

Date Received : Sep 21, 2022
Date Reported : Sep 29, 2022
Report Number : 2420833-6

Page 1 of 1

Sample Number	22108064-1
Sampled Date	Sep 21, 2022 12:10 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Sep 22, 2022
Condition of Sample	Contained in one BOD bottle, four glass vials, three amber glass bottles and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	43450	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.7	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	27.2	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	1.7	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

TESTING
No.0042
Lot ID: 22108066
Date Received : Sep 28, 2022
Date Reported : Oct 04, 2022
Report Number : 2420802-1

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Sample Number 22108066-1
Sampled Date Sep 28, 2022 12:05 PM
Sample Description Wastewater
Location จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced Sep 28, 2022
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	30.0	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33600	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banngkit

Narumon Banchongkit
Supervisor
โทรศัพท์ ๖-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ ๖-323-๙-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Sample Number 22108066-1
Sampled Date Sep 28, 2022 12:05 PM
Sample Description Wastewater
Location จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced Sep 29, 2022
Condition of Sample Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47840	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.7	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	30.0	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	3.4	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 22108066
Date Received : Sep 28, 2022
Date Reported : Oct 05, 2022
Report Number : 2420802-5

Page 1 of 1

Sample Number	22108066-1
Sampled Date	Sep 28, 2022 12:05 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Sep 29, 2022
Condition of Sample	Contained in one BOD bottle, two glass vials, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	-	40	60	≤120	APHA (2017), 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Based on APHA (2017), 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.
Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :
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Technical Management

N. Banthongkit

Narumon Banchongkit
Supervisor
หมายเลขโทรศัพท์ 3-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
หมายเลขโทรศัพท์ 3-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 22114796
Date Received : Oct 05, 2022
Date Reported : Oct 12, 2022
Report Number : 2436456-1

Page 1 of 1

Sample Number	22114796-1
Sampled Date	Oct 05, 2022 9:55 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Oct 05, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	34950	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Chainosorn Lertnathakunchai

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banthongkit

Narumon Banchongkit
Supervisor
หมายเลขโทรศัพท์ 3-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
หมายเลขโทรศัพท์ 3-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22114796

Date Received : Oct 05, 2022
Date Reported : Oct 12, 2022
Report Number : 2436456-2

Page 1 of 1

Sample Number	22114796-1
Sampled Date	Oct 05, 2022 9:55 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Oct 06, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47520	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.5	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	30.9	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	1.4	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Chainusorn Lertnanthakunchai

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042

Lot ID: 22114797

Date Received : Oct 12, 2022
Date Reported : Oct 20, 2022
Report Number : 2436461-1

Page 1 of 1

Sample Number	22114797-1
Sampled Date	Oct 12, 2022 11:10 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Oct 12, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	31950	≤34850 (1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 29,850 mg/L (Refer to Lot ID 22114213-1)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ ๖-323-๙-๙๔๕

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ ๖-323-๙-๙๔๕

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22114797

Date Received : Oct 12, 2022
Date Reported : Oct 20, 2022
Report Number : 2436461-3

Page 1 of 1

Sample Number	22114797-1
Sampled Date	Oct 12, 2022 11:10 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Oct 13, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46500	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.4	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	29.1	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	6.1	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 29,850 mg/L (Refer to Lot ID 22114213-1)

Sampled By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING

No.0042

Lot ID: 22114798

Date Received : Oct 19, 2022
Date Reported : Oct 26, 2022
Report Number : 2436460-1

Page 1 of 1

Sample Number	22114798-1
Sampled Date	Oct 19, 2022 12:55 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Oct 19, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	33.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	33200	≤39300 (1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,300 mg/L (Refer to Lot ID 22127351-1)

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor

เบอร์โทรศัพท์ ๖-323-๙-๙445

Approved by

D. Changchon

Dej Changchon
Senior Manager

เบอร์โทรศัพท์ ๖-323-๙-๙442

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15917-21/ EMAIL

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22114798

Date Received : Oct 19, 2022

Date Reported : Oct 26, 2022

Report Number : 2436460-2

Page 1 of 1

Sample Number	22114798-1
Sampled Date	Oct 19, 2022 12:55 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Oct 20, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47840	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.3	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	28.6	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	1.4	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,300 mg/L (Refer to Lot ID 22127351-1)

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE



TESTING

No.0042

Lot ID: 22114798

Date Received : Oct 19, 2022

Date Reported : Oct 26, 2022

Report Number : 2436460-3

Page 1 of 1

Sample Number	22114798-1
Sampled Date	Oct 19, 2022 12:55 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Oct 20, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	APHA (2017), 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Based on APHA (2017), 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,300 mg/L (Refer to Lot ID 22127351-1)

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ 2-323-ก-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 2-323-ก-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22127243

Date Received : Oct 19, 2022

Date Reported : Nov 01, 2022

Report Number : 2471337-1

Page 1 of 1

Sample Number	22127243-4						
Sampled Date	Oct 19, 2022 12:55 PM						
Sample Description	Seawater						
Location	จุดระบายน้ำฝั่งถนนระบาย ออกจากโครงการ						
Date Analysis Commenced	Oct 20, 2022						
Condition of Sample	Contained in four glass vials, two amber glass bottles and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	0.002	≤0.25	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.03	Based on APHA (2017), 3125	Bangkok
Iron	mg/L	0.001	0.003	0.08	No Standard	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	<0.0005	≤0.20	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	Not Detected	≤0.005	Based on APHA (2017), 3112	Bangkok
Selenium	mg/L	0.003	0.01	0.0006	≤0.02	Based on APHA (2017), 3125	Bangkok
Water Testing							
Sulfate	mg/L	0.6	2	2636	No Standard	Based on APHA (2017), 4500-SO ₄ (E)	Rayong
Sulfide as H ₂ S	mg/L	-	0.01	<0.01	No Standard	Based on APHA (2017), 4500-S ₂ (D)	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22127243

Date Received : Oct 19, 2022

Date Reported : Nov 04, 2022

Report Number : 2471337-2

Page 1 of 1

Sample Number	22127243-4						
Sampled Date	Oct 19, 2022 12:55 PM						
Sample Description	Seawater						
Location	จุดระบายน้ำฝั่งถนนระบาย ออกจากโครงการ						
Date Analysis Commenced	Oct 20, 2022						
Condition of Sample	Contained in four glass vials, two amber glass bottles and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.09	No Standard	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984) , Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 22114799
Date Received : Oct 26, 2022
Date Reported : Nov 02, 2022
Report Number : 2436458-1

Page 1 of 1

Sample Number	22114799-1
Sampled Date	Oct 26, 2022 10:45 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Oct 26, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.6	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	32800	≤38400 (1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,400 mg/L (Refer to Lot ID 22114214-1)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
โทรศัพท์ 323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

โทรศัพท์ 323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22114799
Date Received : Oct 26, 2022
Date Reported : Nov 02, 2022
Report Number : 2436458-2

Page 1 of 1

Sample Number	22114799-1
Sampled Date	Oct 26, 2022 10:45 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Oct 28, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48080	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.8	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	28.1	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	1.4	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,400 mg/L (Refer to Lot ID 22114214-1)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 22132767
Date Received : Nov 02, 2022
Date Reported : Nov 09, 2022
Report Number : 2478388-1

Page 1 of 1

Sample Number	22132767-1
Sampled Date	Nov 02, 2022 11:25 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Nov 02, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.7	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	33.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	33300	≤37000 (1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,000 mg/L (Refer to Lot ID 22133161-1)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banngkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ ๖-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ๖-323-๙-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132767

Date Received : Nov 02, 2022
Date Reported : Nov 09, 2022
Report Number : 2478388-2

Page 1 of 1

Sample Number	22132767-1
Sampled Date	Nov 02, 2022 11:25 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Nov 03, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	51530	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.2	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	29.4	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	3.7	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,000 mg/L (Refer to Lot ID 22133161-1)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

TESTING
No.0042
Lot ID: 22132769
Date Received : Nov 09, 2022
Date Reported : Nov 15, 2022
Report Number : 2478381-1

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Page 1 of 1

Sample Number	22132769-1
Sampled Date	Nov 09, 2022 10:55 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบบ ออกจากโครงการ
Date Analysis Commenced	Nov 09, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	33.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	34000	≤38450 (1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,450 mg/L (Refer to Lot ID 22133215-1)

Sampled By : Chainusorn Lertnanthakunchai

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banmhit

Narumon Banchongkit
Supervisor
หมายเลขโทรศัพท์ 3-323-4-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
หมายเลขโทรศัพท์ 3-323-4-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132769
Date Received : Nov 09, 2022
Date Reported : Nov 15, 2022
Report Number : 2478381-2

Page 1 of 1

Sample Number	22132769-1
Sampled Date	Nov 09, 2022 10:55 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งก่อนระบบ ออกจากโครงการ
Date Analysis Commenced	Nov 10, 2022
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49390	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.9	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	29.6	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	1.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 33,450 mg/L (Refer to Lot ID 22133215-1)

Sampled By : Chainusorn Lertnanthakunchai

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 22132770
Date Received : Nov 16, 2022
Date Reported : Nov 23, 2022
Report Number : 2493714-1

Page 1 of 1

Sample Number	22132770-1
Sampled Date	Nov 16, 2022 2:50 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทั้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Nov 16, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.6	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C *	mg/L	-	5	35050	≤39750 (1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,750 mg/L (Refer to Lot ID 22133182-1)

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banphit

Narumon Banchongkit
Supervisor
หมายเลขที่ 7-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
หมายเลขที่ 7-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132770
Date Received : Nov 16, 2022
Date Reported : Nov 23, 2022
Report Number : 2493714-3

Page 1 of 1

Sample Number	22132770-1
Sampled Date	Nov 16, 2022 2:50 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทั้งก่อนระบาย ออกจากโครงการ
Date Analysis Commenced	Nov 17, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47630	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.6	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	29.8	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	2.1	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,750 mg/L (Refer to Lot ID 22133182-1)

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 22132770

Date Received : Nov 16, 2022

Date Reported : Nov 23, 2022

Report Number : 2493714-4

Page 1 of 1

Sample Number	22132770-1						
Sampled Date	Nov 16, 2022 2:50 PM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ						
Date Analysis Commenced	Nov 17, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	APHA (2017), 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	APHA (2017), 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Based on APHA (2017), 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	APHA (2017), 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,750 mg/L (Refer to Lot ID 22133182-1)

Sampled By : Paramet Sattayakun , Thanasoun Namakunna

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor

ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ๖-323-๖-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 22132771

Date Received : Nov 23, 2022

Date Reported : Nov 30, 2022

Report Number : 2478372-1

Page 1 of 1

Sample Number	22132771-1						
Sampled Date	Nov 23, 2022 11:10 AM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ						
Date Analysis Commenced	Nov 23, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Temperature *	Degree C	-	-	34.3	≤40	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33750	≤39100 (1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,100 mg/L (Refer to Lot ID 22133220-1)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banphit

Narumon Banchoangkit
Supervisor

ทะเบียนเลขที่ ๖-323-๖-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ๖-323-๖-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132771
Date Received : Nov 23, 2022
Date Reported : Nov 30, 2022
Report Number : 2478372-2

Page 1 of 1

Sample Number	22132771-1						
Sampled Date	Nov 23, 2022 11:10 AM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทั้งก่อนระบาย ออกจากโครงการ						
Date Analysis Commenced	Nov 24, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48670	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.8	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	28.5	No Standard	Based on APHA (2017), 2520 B	Rayong
Turbidity	NTU	-	0.1	0.6	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,100 mg/L (Refer to Lot ID 22133220-1)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banachkit

Narumon Banachkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132772
Date Received : Nov 30, 2022
Date Reported : Dec 08, 2022
Report Number : 2478370-1

Page 1 of 1

Sample Number	22132772-1						
Sampled Date	Nov 30, 2022 11:25 AM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทั้งก่อนระบาย ออกจากโครงการ						
Date Analysis Commenced	Nov 30, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	34.9	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30800	≤35300 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 30,300 mg/L (Refer to Lot ID 22133221-1)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management

N. Banachkit

Narumon Banachkit
Supervisor

ทะเบียนเลขที่ ๖-323-๙-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ ๖-323-๙-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132772
Date Received : Nov 30, 2022
Date Reported : Dec 08, 2022
Report Number : 2478370-2

Page 1 of 1

Sample Number	22132772-1						
Sampled Date	Nov 30, 2022 11:25 AM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ						
Date Analysis Commenced	Dec 01, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	45650	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	28.5	No Standard	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	3.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 30,300 mg/L (Refer to Lot ID 22133221-1)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22146968
Date Received : Dec 07, 2022
Date Reported : Dec 14, 2022
Report Number : 2511980-1

Page 1 of 1

Sample Number	22146968-1						
Sampled Date	Dec 07, 2022 10:50 AM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ						
Date Analysis Commenced	Dec 07, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature	Degree C	-	-	34.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30450	≤35150 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 30,150 mg/L (Refer to Lot ID 22145970-1)

Sampling By : Chainusorn Lertnanthakunchai ทะเบียนเลขที่ 2-323-ก-9461

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
ทะเบียนเลขที่ 2-323-ก-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
ทะเบียนเลขที่ 2-323-ก-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22146968
Date Received : Dec 07, 2022
Date Reported : Dec 14, 2022
Report Number : 2511980-2

Page 1 of 1

Sample Number	22146968-1
Sampled Date	Dec 07, 2022 10:50 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งกลอกระมา ออกจากโครงการ
Date Analysis Commenced	Dec 08, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46810	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	28.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	7.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 30,150 mg/L (Refer to Lot ID 22145970-1)

Sampling By : Chainusorn Lertnanthakunchai โทร 09-323-9-9461

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchookit

Narumon Banchookit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 22146969
Date Received : Dec 14, 2022
Date Reported : Dec 22, 2022
Report Number : 2511974-1

Page 1 of 1

Sample Number	22146969-1
Sampled Date	Dec 14, 2022 12:40 PM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งกลอกระมา ออกจากโครงการ
Date Analysis Commenced	Dec 14, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	34.2	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33700	≤37700 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,700 mg/L (Refer to Lot ID 22146037-1)

Sampling By : Paramet Sattayakun โทร 09-323-9-9476

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchookit

Narumon Banchookit
Supervisor

โทร 09-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

โทร 09-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22146969

Date Received : Dec 14, 2022

Date Reported : Dec 22, 2022

Report Number : 2511974-2

Page 1 of 1

Sample Number	22146969-1						
Sampled Date	Dec 14, 2022 12:40 PM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทิ้งกลั่นกรองน้ำ ออกจากโครงการ						
Date Analysis Commenced	Dec 15, 2022						
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	49340	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	27.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	5.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,700 mg/L (Refer to Lot ID 22146037-1)

Sampling By : Paramet Sattayakun ทะเบียนเลขที่ 7-323-ก-9476

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE



TESTING

No.0042

Lot ID: 22146954

Date Received : Dec 21, 2022

Date Reported : Dec 28, 2022

Report Number : 2511930-1

Page 1 of 1

Sample Number	22146954-1						
Sampled Date	Dec 21, 2022 11:00 AM						
Sample Description	Wastewater						
Location	จุดระบายน้ำทิ้งกลั่นกรองน้ำ ออกจากโครงการ						
Date Analysis Commenced	Dec 21, 2022						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.5	≤40	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33300	≤37800 (1)	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,800 mg/L (Refer to Lot ID 22146004-1)

Sampling By : Paramet Sattayakun ทะเบียนเลขที่ 7-323-ก-9476 , Panpong Manit ทะเบียนเลขที่ 7-204-ก-8600

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor

ทะเบียนเลขที่ 7-323-ก-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

ทะเบียนเลขที่ 7-323-ก-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-DM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22146954
Date Received : Dec 21, 2022
Date Reported : Dec 28, 2022
Report Number : 2511930-3

Page 1 of 1

Sample Number	22146954-1					
Sampled Date	Dec 21, 2022 11:00 AM					
Sample Description	Wastewater					
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ					
Date Analysis Commenced	Dec 22, 2022					
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	45840	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	29.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	4.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,800 mg/L (Refer to Lot ID 22146004-1)

Sampling By : Paramet Sattayakun โทรณณเลขที่ 323-3-9476 , Panupong Manit โทรณณเลขที่ 204-3-8600

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchookit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

TESTING
No.0042
Lot ID: 22146954
Date Received : Dec 21, 2022
Date Reported : Dec 28, 2022
Report Number : 2511930-4

Page 1 of 1

Sample Number	22146954-1					
Sampled Date	Dec 21, 2022 11:00 AM					
Sample Description	Wastewater					
Location	จุดระบายน้ำทิ้งก่อนระบาย ออกจากโครงการ					
Date Analysis Commenced	Dec 21, 2022					
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)					

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
COD *	mg/L	-	40	<40	≤120	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 C	Rayong
Oil & Grease *	mg/L	-	1	2	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,800 mg/L (Refer to Lot ID 22146004-1)

Sampling By : Paramet Sattayakun โทรณณเลขที่ 323-3-9476 , Panupong Mani โทรณณเลขที่ 204-3-8600

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchookit

Narumon Banchongkit
Supervisor

โทรณณเลขที่ 323-3-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager

โทรณณเลขที่ 323-3-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 22146953
Date Received : Dec 29, 2022
Date Reported : Jan 05, 2023
Report Number : 2511963-1

Page 1 of 1

Sample Number	22146953-1
Sampled Date	Dec 29, 2022 10:55 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งจากกระบวนการ ออกจากโครงการ
Date Analysis Commenced	Dec 29, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	31.2	≤40	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33800	≤37550(1)	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,550 mg/L (Refer to Lot ID 22146038-1)

Sampling By : Chainusorn Lertnanthakunchai โทร 09-323-9-9461

Remark :
- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
โทร 09-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทร 09-323-9-9442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22146953
Date Received : Dec 29, 2022
Date Reported : Jan 05, 2023
Report Number : 2511963-2

Page 1 of 1

Sample Number	22146953-1
Sampled Date	Dec 29, 2022 10:55 AM
Sample Description	Wastewater
Location	จุดระบายน้ำทิ้งจากกระบวนการ ออกจากโครงการ
Date Analysis Commenced	Dec 30, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46700	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	4.2	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
Salinity	ppt	-	0.1	28.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Turbidity	NTU	-	0.1	2.6	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,550 mg/L (Refer to Lot ID 22146038-1)

Sampling By : Chainusorn Lertnanthakunchai โทร 09-323-9-9461

Remark :
- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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คุณภาพน้ำจากถังปรับสภาพให้เป็นกลางที่บำบัดน้ำเสีย
จากระบบ condensate polisher



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location: GHECO-ONE



TESTING
No.0042

Lot ID: 2283133
Date Received : Jul 27, 2022
Date Reported : Aug 01, 2022
Report Number : 2366456-1

Page 1 of 1

Sample Number 2283133-1
Sampled Date Jul 27, 2022 6:30 AM
Sample Description Wastewater
Location น้ำทิ้งจากถังรับสภาพให้เป็นกลางที่นำกรดน้ำเสียจากกระบวนการ condensate polisher
Date Analysis Commenced Jul 29, 2022
Condition of Sample Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.9	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	984	≤3000	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchoangkit

Narumon Banchoangkit
Supervisor
หมายเลขโทรศัพท์ 323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
หมายเลขโทรศัพท์ 323-9-9442

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location: GHECO-ONE



TESTING
No.0042

Lot ID: 2293902
Date Received : Aug 19, 2022
Date Reported : Aug 23, 2022
Report Number : 2391523-1

Page 1 of 1

Sample Number 2293902-1
Sampled Date Aug 18, 2022 2:50 PM
Sample Description Wastewater
Location น้ำทิ้งจากถังรับสภาพให้เป็นกลางที่นำกรดน้ำเสียจากกระบวนการ condensate polisher
Date Analysis Commenced Aug 19, 2022
Condition of Sample Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	6.4	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	320	≤3000	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

Remark :

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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

N. Banchoangkit

Narumon Banchoangkit
Supervisor

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 22107343
Date Received : Sep 07, 2022
Date Reported : Sep 12, 2022
Report Number : 2420775-1

Page 1 of 1

Sample Number	22107343-1
Sampled Date	Sep 07, 2022 6:40 AM
Sample Description	Wastewater
Location	น้ำทิ้งจากถังรับสภาพให้เป็นกลางที่บำบัดน้ำเสียจากกระบวนการ condensate polisher
Date Analysis Commenced	Sep 08, 2022
Condition of Sample	Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.8	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1620	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Remark :
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Technical Management

N. Banongkit

Narumon Banchongkit
Supervisor
โทรศัพท์ 0-323-9-9445

Approved by

D. Changchon

Dej Changchon
Senior Manager
โทรศัพท์ 0-323-9-9442

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P/O :
Project Name :
Project Location : GHECO-ONE



TESTING
No.0042
Lot ID: 22114801
Date Received : Oct 20, 2022
Date Reported : Oct 25, 2022
Report Number : 2436464-1

Page 1 of 1

Sample Number	22114801-1
Sampled Date	Oct 19, 2022 4:30 PM
Sample Description	Wastewater
Location	น้ำทิ้งจากถังรับสภาพให้เป็นกลางที่บำบัดน้ำเสียจากกระบวนการ condensate polisher
Date Analysis Commenced	Oct 21, 2022
Condition of Sample	Contained in one plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.0	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	<5	(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).
(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Remark :
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Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE



TESTING

No.0042

Lot ID: 22132755

Date Received : Nov 16, 2022

Date Reported : Nov 22, 2022

Report Number : 2478330-1

Page 1 of 1

Sample Number	22132755-1
Sampled Date	Nov 16, 2022 9:20 AM
Sample Description	Wastewater
Location	น้ำทิ้งจากถังปรับสภาพให้เป็นกลางที่บำบัดน้ำเสียจากกระบวนการ condensate polisher
Date Analysis Commenced	Nov 17, 2022
Condition of Sample	Contained in three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)c

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	26	≤39750(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 34,750 mg/L (Refer to Lot ID 22133182-1)

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchookit

Narumon Banchookit

Supervisor

โทรศัพท์ ๖-323-๙-๙445

Approved by

D. Changchon

Dej Changchon

Senior Manager

โทรศัพท์ ๖-323-๙-๙442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE



TESTING

No.0042

Lot ID: 22146976

Date Received : Dec 12, 2022

Date Reported : Dec 17, 2022

Report Number : 2511986-1

Page 1 of 1

Sample Number	22146976-1
Sampled Date	Dec 09, 2022 10:10 PM
Sample Description	Wastewater
Location	น้ำทิ้งจากถังปรับสภาพให้เป็นกลางที่บำบัดน้ำเสียจากกระบวนการ condensate polisher
Date Analysis Commenced	Dec 13, 2022
Condition of Sample	Contained in three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)c

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	8.2	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	588	≤35150(1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 30,150 mg/L (Refer to Lot ID 22145970-1)

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchookit

Narumon Banchookit

Supervisor

โทรศัพท์ ๖-323-๙-๙445

Approved by

D. Changchon

Dej Changchon

Senior Manager

โทรศัพท์ ๖-323-๙-๙442

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2285327

Date Received : Jul 14, 2022

Date Reported : Jan 25, 2023

Report Number : 2464492-1 C2

Page 1 of 1

Sample Number	2285327-1						
Sampled Date	Jul 14, 2022 12:40 PM						
Sample Description	Sea Water						
Location	สถานี 1 บริเวณโถงจุดสูบน้ำเข้าโรงหล่อแผ่น						
Date Analysis Commenced	Jul 14, 2022						
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47020	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.5	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	8.1	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	30.3	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	32.6	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32950	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	2.1	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	2.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2371706-1, Date Reported : Jul 19, 2022 due to revise guideline/specification

Sampled By : Tanasit Wongsachai

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2285327

Date Received : Jul 14, 2022

Date Reported : Jan 25, 2023

Report Number : 2464493-1 C2

Page 1 of 1

Sample Number	2285327-2						
Sampled Date	Jul 14, 2022 2:05 PM						
Sample Description	Sea Water						
Location	บริเวณประตูระบายน้ำทิ้งของโรงไฟฟ้า (จุด E)						
Date Analysis Commenced	Jul 14, 2022						
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47100	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.6	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	30.0	No Standard	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.8	No Standard	Based on APHA (2017), 2550 B	Rayong
Transparency	m	-	-	0.7	No Standard	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	9.1	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,950 mg/L (Refer to Lot ID 2285327-1)

This Analysis test report is reissued to supersede report No.2371706-1, Date Reported : Jul 19, 2022 due to revise guideline/specification

Sampled By : Tanasit Wongsachai

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2285327

Date Received : Jul 14, 2022

Date Reported : Jan 25, 2023

Report Number : 2464493-2 C2

Page 1 of 1

Sample Number	2285327-2
Sampled Date	Jul 14, 2022 2:05 PM
Sample Description	Sea Water
Location	บริเวณประตูระบายน้ำของโรงไฟฟ้า (จุด E)
Date Analysis Commenced	Jul 15, 2022
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.3	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32750	≤37950 (1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 32,950 mg/L (Refer to Lot ID 2285327-1)

This Analysis test report is reissued to supersede report No.2371706-1, Date Reported : Jul 19, 2022 due to revise guideline/specification

Sampled By : Tanasit Wongsachai

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banachit

Narumon Banchongkit
Supervisor

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Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2285327

Date Received : Jul 14, 2022

Date Reported : Jan 25, 2023

Report Number : 2464494-1 C2

Page 1 of 1

Sample Number	2285327-3
Sampled Date	Jul 14, 2022 1:32 PM
Sample Description	Sea Water
Location	สถานี A อู่ท่าเรือจุกตะกวดระยะทางน้ำทั้ง 500 เมตร
Date Analysis Commenced	Jul 14, 2022
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46930	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.6	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C		-	-	7.6	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	29.9	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	32.7	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32400	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	0.1	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	8.6	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2371706-1, Date Reported : Jul 19, 2022 due to revise guideline/specification

Sampled By : Tanasit Wongsachai

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banachit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2285327

Date Received : Jul 14, 2022

Date Reported : Jan 25, 2023

Report Number : 2464495-1 C2

Page 1 of 1

Sample Number	2285327-4
Sampled Date	Jul 14, 2022 1:46 PM
Sample Description	Sea Water
Location	สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
Date Analysis Commenced	Jul 14, 2022
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46920	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.7	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.5	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	29.6	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	32.4	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31650	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	0.6	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	13.0	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2371706-1, Date Reported : Jul 19, 2022 due to revise guideline/specification

Sampled By : Tanasit Wongsachai

Remark :

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Approved by

N. Banphit

Narumon Banchongkit
Supervisor

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P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2285327

Date Received : Jul 14, 2022

Date Reported : Jan 25, 2023

Report Number : 2464496-1 C2

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Sample Number	2285327-5
Sampled Date	Jul 14, 2022 2:43 PM
Sample Description	Sea Water
Location	สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
Date Analysis Commenced	Jul 14, 2022
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47020	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.4	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.8	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	30.2	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	32.9	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33000	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	0.5	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	13.2	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2371706-1, Date Reported : Jul 19, 2022 due to revise guideline/specification

Sampled By : Tanasit Wongsachai

Remark :

- LOD : Limit of Detection
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Narumon Banchongkit
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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2285327
Date Received : Jul 14, 2022
Date Reported : Jan 25, 2023
Report Number : 2464497-1 C2

Page 1 of 1

Sample Number 2285327-6
Sampled Date Jul 14, 2022 1:10 PM
Sample Description Sea Water
Location สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
Date Analysis Commenced Jul 14, 2022
Condition of Sample Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47100	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.5	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.6	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	30.0	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.5	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32100	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	0.9	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	11.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2371706-1, Date Reported : Jul 19, 2022 due to revise guideline/specification

Sampled By : Tanasit Wongsachai

Remark :
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Narumon Banongkit
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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 2285327
Date Received : Jul 14, 2022
Date Reported : Jan 25, 2023
Report Number : 2464498-1 C2

Page 1 of 1

Sample Number 2285327-7
Sampled Date Jul 14, 2022 3:28 PM
Sample Description Sea Water
Location สถานี C อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
Date Analysis Commenced Jul 14, 2022
Condition of Sample Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46290	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.5	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	29.5	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	32.5	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33200	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	1.7	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	10.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2371706-1, Date Reported : Jul 19, 2022 due to revise guideline/specification

Sampled By : Tanasit Wongsachai

Remark :
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2294323
Date Received : Aug 17, 2022
Date Reported : Jan 25, 2023
Report Number : 2464447-1 C2

Page 1 of 1

Sample Number	2294323-1						
Sampled Date	Aug 17, 2022 9:50 AM						
Sample Description	Sea Water						
Location	สถานี 1 บริเวณใกล้จุดสูบน้ำทิ้งของโรงไฟฟ้า						
Date Analysis Commenced	Aug 17, 2022						
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48260	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.0	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.8	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	29.7	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	30.7	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31600	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	1.2	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	3.7	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2391614-1, Date Reported : Aug 22, 2022 due to revise guideline/specification

Sampled By : Pathompong Kornawat

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N. Banachkit

Narumon Banachkit
Supervisor

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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2294323
Date Received : Aug 17, 2022
Date Reported : Jan 25, 2023
Report Number : 2464448-1 C2

Page 1 of 1

Sample Number	2294323-2						
Sampled Date	Aug 17, 2022 10:08 AM						
Sample Description	Sea Water						
Location	บริเวณประตุน้ำทิ้งของโรงไฟฟ้า (จุด E)						
Date Analysis Commenced	Aug 17, 2022						
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47680	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	4.7	No Standard	Based on APHA (2017), 4500-O(C)	Rayong
Salinity	ppt	-	0.1	30.0	No Standard	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	32.0	No Standard	Based on APHA (2017), 2550 B	Rayong
Transparency	m	-	-	1.2	No Standard	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	8.4	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 31,600 mg/L (Refer to Lot ID 2294323-1)

This Analysis test report is reissued to supersede report No.2391614-1, Date Reported : Aug 22, 2022 due to revise guideline/specification

Sampled By : Pathompong Kornawat

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N. Banachkit

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P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2294323

Date Received : Aug 17, 2022

Date Reported : Jan 25, 2023

Report Number : 2464448-2 C2

Page 1 of 1

Sample Number	2294323-2
Sampled Date	Aug 17, 2022 10:08 AM
Sample Description	Sea Water
Location	บริเวณประตูระบายน้ำของโรงไฟฟ้า (จุด E)
Date Analysis Commenced	Aug 18, 2022
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
pH at 25 degree C		-	-	7.1	5.5-9.0	Based on APHA (2017), 4500-H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32200	≤36600 (1)	APHA (2017), 2540 C	Rayong

Guideline : Effluent standard for factories, industrial estate and industrial park set by Notification of the Ministry of Natural Resource and Environment and effluent standard for factories and industrial park set by Notification of The Ministry of Industry dated June 07, B.E.2560 (2017).

(1) Total Dissolved Solids when discharged to receiving water having TDS > 3,000 mg/L, TDS in the to-be-discharged wastewater can exceed the TDS already found in the receiving water by not higher than 5,000 mg/L.

Note : Total Dissolved Solids of receiving water is 31,600 mg/L (Refer to Lot ID 2294323-1)

This Analysis test report is reissued to supersede report No.2391614-1, Date Reported : Aug 22, 2022 due to revise guideline/specification

Sampled By : Pathompong Kornasawit

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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N. Banchongkit

Narumon Banchongkit
Supervisor

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P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 2294323

Date Received : Aug 17, 2022

Date Reported : Jan 25, 2023

Report Number : 2464449-1 C2

Page 1 of 1

Sample Number	2294323-3
Sampled Date	Aug 17, 2022 10:00 AM
Sample Description	Sea Water
Location	สถานี A อนุทางจากจุดระบายน้ำทั้ง 500 เมตร
Date Analysis Commenced	Aug 17, 2022
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47610	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.4	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C		-	-	7.5	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	29.6	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	32.0	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31800	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	1.2	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	11.1	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2391614-1, Date Reported : Aug 22, 2022 due to revise guideline/specification

Sampled By : Pathompong Kornasawit

Remark :

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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2294323
Date Received : Aug 17, 2022
Date Reported : Jan 25, 2023
Report Number : 2464450-1 C2

Page 1 of 1

Sample Number	2294323-4						
Sampled Date	Aug 17, 2022 10:04 AM						
Sample Description	Sea Water						
Location	สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร						
Date Analysis Commenced	Aug 17, 2022						
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47730	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.2	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.4	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	29.4	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.8	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31500	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	1.2	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	10.6	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2391614-1, Date Reported : Aug 22, 2022 due to revise guideline/specification

Sampled By : Pathompong Kornasawat

Remark :
- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banachit

Narumon Banachonkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2294323
Date Received : Aug 17, 2022
Date Reported : Jan 25, 2023
Report Number : 2464451-1 C2

Page 1 of 1

Sample Number	2294323-5						
Sampled Date	Aug 17, 2022 10:15 AM						
Sample Description	Sea Water						
Location	สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร						
Date Analysis Commenced	Aug 17, 2022						
Condition of Sample	Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47800	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	4.8	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.8	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	29.2	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.1	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31950	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	1.1	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	24.2	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2391614-1, Date Reported : Aug 22, 2022 due to revise guideline/specification

Sampled By : Pathompong Kornasawat

Remark :
- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banachit

Narumon Banachonkit
Supervisor

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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2294323
Date Received : Aug 17, 2022
Date Reported : Jan 25, 2023
Report Number : 2464452-1 C2

Page 1 of 1

Sample Number 2294323-6
Sampled Date Aug 17, 2022 9:57 AM
Sample Description Sea Water
Location สถานี B อู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
Date Analysis Commenced Aug 17, 2022
Condition of Sample Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47500	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	4.5	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C		-	-	7.6	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	29.3	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.0	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33550	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	1.2	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	7.9	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2391614-1, Date Reported : Aug 22, 2022 due to revise guideline/specification

Sampled By : Pathompong Komsawat

Remark :
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Approved by

N. Banngmit

Narumon Banchoangkit
Supervisor

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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 2294323
Date Received : Aug 17, 2022
Date Reported : Jan 25, 2023
Report Number : 2464453-1 C2

Page 1 of 1

Sample Number 2294323-7
Sampled Date Aug 17, 2022 10:23 AM
Sample Description Sea Water
Location สถานี C อู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
Date Analysis Commenced Aug 17, 2022
Condition of Sample Contained in one BOD bottle and one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48240	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	4.5	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C		-	-	7.8	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Salinity	ppt	-	0.1	29.7	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	30.7	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32450	No Standard	APHA (2017), 2540 C	Rayong
Transparency	m	-	-	1.0	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	13.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2391614-1, Date Reported : Aug 22, 2022 due to revise guideline/specification

Sampled By : Pathompong Komsawat

Remark :
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Approved by

N. Banngmit

Narumon Banchoangkit
Supervisor

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22107401
Date Received : Sep 14, 2022
Date Reported : Jan 18, 2023
Report Number : 2545754-1

Page 1 of 2

Sample Number	22107401-1
Sampled Date	Sep 14, 2022 10:22 AM
Sample Description	Sea Water
Location	สถานี I : บริเวณใกล้จุดสูบน้ำไปทะเลเขื่อน
Date Analysis Commenced	Sep 14, 2022
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Iron	mg/L	0.001	0.003	0.02	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	<0.003	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48040	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.0	>4	Based on APHA (2017), 4500-Q(C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.12	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984) ; Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.1	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Sulfate	mg/L	0.6	2	2594	No Standard	Based on APHA (2017), 4500-SO ₄ (E)	Rayong
Temperature	Degree C	-	-	30.6	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong

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Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22107401
Date Received : Sep 14, 2022
Date Reported : Jan 18, 2023
Report Number : 2545754-1

Page 2 of 2

Sample Number	22107401-1
Sampled Date	Sep 14, 2022 10:22 AM
Sample Description	Sea Water
Location	สถานี I : บริเวณใกล้จุดสูบน้ำไปทะเลเขื่อน
Date Analysis Commenced	Sep 14, 2022
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34000	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	<2	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.2	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	2.1	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2447108-1, Date Reported : Nov 04, 2022 due to revise analytical information.

Sampling By :

Remark :
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Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22107401
Date Received : Sep 14, 2022
Date Reported : Jan 18, 2023
Report Number : 2545755-1

Page 1 of 2

Sample Number 22107401-2
Sampled Date Sep 14, 2022 11:22 AM
Sample Description Sea Water
Location บริเวณประตุน้ำทิ้งของโรงไฟฟ้า (จุด E)
Date Analysis Commenced Sep 14, 2022
Condition of Sample Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Iron	mg/L	0.001	0.003	0.07	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
COD	mg/L	1.5	5	<40	No Standard	APHA (2017), 5220 C	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47810	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.9	>4	Based on APHA (2017), 4500-O(C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Based on APHA (2017), 5520 B	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.22	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984) Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.0	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	32.5	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong

Approved by

Siriluk P.
Siriluk Puengpang
Supervisor

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22107401
Date Received : Sep 14, 2022
Date Reported : Jan 18, 2023
Report Number : 2545755-1

Page 2 of 2

Sample Number 22107401-2
Sampled Date Sep 14, 2022 11:22 AM
Sample Description Sea Water
Location บริเวณประตุน้ำทิ้งของโรงไฟฟ้า (จุด E)
Date Analysis Commenced Sep 14, 2022
Condition of Sample Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34100	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	7	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	1.8	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	4.4	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2447109-1, Date Reported : Nov 04, 2022 due to revise analytical information.

Sampling By :

Remark :
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Approved by

Siriluk P.
Siriluk Puengpang
Supervisor

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22107401

Date Received : Sep 14, 2022

Date Reported : Jan 18, 2023

Report Number : 2545755-2

Page 1 of 1

Sample Number	22107401-2						
Sampled Date	Sep 14, 2022 11:22 AM						
Sample Description	Sea Water						
Location	บริเวณประตุน้ำทิ้งของโรงไฟฟ้า (จุด E)						
Date Analysis Commenced	Sep 16, 2022						
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Sulfate	mg/L	0.6	2	2804	No Standard	Based on APHA (2017), 4500-SO ₄ (E)	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

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Sampling By :

Remark :

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N. Banphit

Narumon Banchongkit
Supervisor

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22107401

Date Received : Sep 14, 2022

Date Reported : Jan 18, 2023

Report Number : 2545756-1

Page 1 of 2

Sample Number	22107401-3						
Sampled Date	Sep 14, 2022 11:11 AM						
Sample Description	Sea Water						
Location	สถานี A : อู่ท่าจากจุดระยะน้ำทิ้ง 500 เมตร						
Date Analysis Commenced	Sep 14, 2022						
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Iron	mg/L	0.001	0.003	0.04	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47700	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.7	>4	Based on APHA (2017), 4500-O(C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.05	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984) , Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	29.9	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.7	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33750	No Standard	APHA (2017), 2540 C	Rayong

Approved by

Siriluk P.

Siriluk Puenggang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22107401
Date Received : Sep 14, 2022
Date Reported : Jan 18, 2023
Report Number : 2545756-1

Page 2 of 2

Sample Number 22107401-3
Sampled Date Sep 14, 2022 11:11 AM
Sample Description Sea Water
Location สถานี A : อยู่ห่างจากจุดระบายน้ำทิ้ง 500 เมตร
Date Analysis Commenced Sep 14, 2022
Condition of Sample Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	3	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.0	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	3.4	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2447110-1, Date Reported : Nov 04, 2022 due to revise analytical information.

Sampling By :

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22107401
Date Received : Sep 14, 2022
Date Reported : Jan 18, 2023
Report Number : 2545757-1

Page 1 of 2

Sample Number 22107401-4
Sampled Date Sep 14, 2022 11:16 AM
Sample Description Sea Water
Location สถานี D : อยู่ห่างจากจุดระบายน้ำทิ้ง 500 เมตร
Date Analysis Commenced Sep 14, 2022
Condition of Sample Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Iron	mg/L	0.001	0.003	0.05	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47860	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.6	>4	Based on APHA (2017), 4500-O(C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.09	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984) , Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	29.8	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	33.0	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34050	No Standard	APHA (2017), 2540 C	Rayong

Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22107401
Date Received : Sep 14, 2022
Date Reported : Jan 18, 2023
Report Number : 2545757-1

Page 2 of 2

Sample Number	22107401-4						
Sampled Date	Sep 14, 2022 11:16 AM						
Sample Description	Sea Water						
Location	สถานี D : อุโมงค์จากจุดระบายน้ำทั้ง 500 เมตร						
Date Analysis Commenced	Sep 14, 2022						
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	4	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.6	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	3.4	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2447111-1, Date Reported : Nov 04, 2022 due to revise analytical information.

Sampling By :

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Siriluk P.

Siriluk Puengpang
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22107401
Date Received : Sep 14, 2022
Date Reported : Jan 18, 2023
Report Number : 2545758-1

Page 1 of 2

Sample Number	22107401-5						
Sampled Date	Sep 14, 2022 11:37 AM						
Sample Description	Sea Water						
Location	สถานี O : อุโมงค์จากจุดระบายน้ำทั้ง 500 เมตร						
Date Analysis Commenced	Sep 14, 2022						
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Iron	mg/L	0.001	0.003	0.14	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	44470	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.2	>4	Based on APHA (2017), 4500-O(C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.21	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984), Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	27.3	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.9	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30150	No Standard	APHA (2017), 2540 C	Rayong

Approved by

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Siriluk Puengpang
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22107401

Date Received : Sep 14, 2022

Date Reported : Jan 18, 2023

Report Number : 2545758-1

Page 2 of 2

Sample Number	22107401-5						
Sampled Date	Sep 14, 2022 11:37 AM						
Sample Description	Sea Water						
Location	สถานี O : อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร						
Date Analysis Commenced	Sep 14, 2022						
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	6	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	1.2	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	5.5	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2447112-1, Date Reported : Nov 04, 2022 due to revise analytical information.

Sampling By :

Remark :

- LOD : Limit of Detection
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Approved by

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Siriluk Puengpang
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22107401

Date Received : Sep 14, 2022

Date Reported : Jan 18, 2023

Report Number : 2545759-1

Page 1 of 2

Sample Number	22107401-6						
Sampled Date	Sep 14, 2022 10:38 AM						
Sample Description	Sea Water						
Location	สถานี B : อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร						
Date Analysis Commenced	Sep 14, 2022						
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	Not Detected	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Iron	mg/L	0.001	0.003	0.08	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	48030	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.8	>4	Based on APHA (2017), 4500-O(C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.05	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984) , Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	29.8	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.5	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33450	No Standard	APHA (2017), 2540 C	Rayong

Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22107401

Date Received : Sep 14, 2022

Date Reported : Jan 18, 2023

Report Number : 2545759-1

Page 2 of 2

Sample Number	22107401-6						
Sampled Date	Sep 14, 2022 10:38 AM						
Sample Description	Sea Water						
Location	สถานี B : อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร						
Date Analysis Commenced	Sep 14, 2022						
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	9	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.5	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	1.4	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2447113-1, Date Reported : Nov 04, 2022 due to revise analytical information.

Sampling By :

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Siriluk P.

Siriluk Puenggang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22107401

Date Received : Sep 14, 2022

Date Reported : Jan 18, 2023

Report Number : 2545760-1

Page 1 of 2

Sample Number	22107401-7						
Sampled Date	Sep 14, 2022 11:52 AM						
Sample Description	Sea Water						
Location	สถานี C : อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร						
Date Analysis Commenced	Sep 14, 2022						
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic	mg/L	0.002	0.005	<0.005	≤0.01	Based on APHA (2017), 3125	Bangkok
Cadmium	mg/L	0.0009	0.003	Not Detected	≤0.005	Based on APHA (2017), 3125	Bangkok
Iron	mg/L	0.001	0.003	0.06	≤0.3	Based on APHA (2017), 3125	Bangkok
Lead	mg/L	0.001	0.003	Not Detected	≤0.0085	Based on APHA (2017), 3125	Bangkok
Mercury	mg/L	0.000003	0.00005	<0.00005	≤0.0001	Based on US EPA, Method 1631 Revision E	Bangkok
Selenium	mg/L	0.003	0.01	Not Detected	No Standard	Based on APHA (2017), 3125	Bangkok
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46330	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	5.0	>4	Based on APHA (2017), 4500-O(C)	Rayong
Petroleum Hydrocarbon	ug/L	0.015	0.05	0.05	≤5	Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984), Pre-Concentration, Fluorescence Spectrophotometric Method (IOC/UNESCO, 1984)	Bangkok
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	28.7	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	32.2	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32600	No Standard	APHA (2017), 2540 C	Rayong

Approved by

Siriluk P.

Siriluk Puenggang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22107401

Date Received : Sep 14, 2022

Date Reported : Jan 18, 2023

Report Number : 2545760-1

Page 2 of 2

Sample Number	22107401-7
Sampled Date	Sep 14, 2022 11:52 AM
Sample Description	Sea Water
Location	สถานี C : อู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
Date Analysis Commenced	Sep 14, 2022
Condition of Sample	Contained in one BOD bottle, four glass vials, two amber glass bottles and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	14	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	1.2	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	5.9	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Note : This Analysis test report is reissued to supersede report No.2447114-1, Date Reported : Nov 04, 2022 due to revise analytical information.

Sampling By :

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Siriluk P.

Siriluk Puengpang
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22114802

Date Received : Oct 05, 2022

Date Reported : Oct 12, 2022

Report Number : 2436489-1

Page 1 of 8

Sample Number	22114802-1
Sampled Date	Oct 05, 2022 10:10 AM
Sample Description	Sea Water
Location	สถานี I บริเวณใกล้จุดสูบน้ำเข้าใหม่ลงเขื่อน
Date Analysis Commenced	Oct 05, 2022
Condition of Sample	Contained in one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47300	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.3	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.9	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.8	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	32.1	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	35300	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	<2	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	3.6	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	1.1	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Pitthaya Thongtaeng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banthit

Narumon Banthongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22114802
Date Received : Oct 05, 2022
Date Reported : Oct 12, 2022
Report Number : 2436489-1

Page 2 of 8

Sample Number 22114802-2
Sampled Date Oct 05, 2022 10:41 AM
Sample Description Sea Water
Location สถานี E บริเวณโถงน้ำจืด
Date Analysis Commenced Oct 05, 2022
Condition of Sample Contained in one BOD bottle, one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	No Standard	APHA (2017), 5210 B	Rayong
COD	mg/L	-	-	40	No Standard	APHA (2017), 5220 C	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47080	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.8	>4	Based on APHA (2017), 4500-O(C)	Rayong
Oil & Grease	mg/L	-	3	<3	No Standard	Based on APHA (2017), 5520 B	Rayong
pH at 25 degree C		-	-	7.7	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.1	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.9	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	35900	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	3	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.6	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	0.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Pithaya Thongtaeng

Remark :

Approved by

N. Banthit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22114802
Date Received : Oct 05, 2022
Date Reported : Oct 12, 2022
Report Number : 2436489-1

Page 3 of 8

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banthit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22114802
Date Received : Oct 05, 2022
Date Reported : Oct 12, 2022
Report Number : 2436489-1

Page 4 of 8

Sample Number	22114802-3						
Sampled Date	Oct 05, 2022 10:29 AM						
Sample Description	Sea Water						
Location	สถานี A อยู่ห่างจากจุดระบายน้ำทิ้ง 500 เมตร						
Date Analysis Commenced	Oct 05, 2022						
Condition of Sample	Contained in one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47080	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.9	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C		-	-	7.7	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.9	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.4	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	35350	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	2	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.6	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	1.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Pitthaya Thongtaeng

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22114802
Date Received : Oct 05, 2022
Date Reported : Oct 12, 2022
Report Number : 2436489-1

Page 5 of 8

Sample Number	22114802-4						
Sampled Date	Oct 05, 2022 10:35 AM						
Sample Description	Sea Water						
Location	สถานี D อยู่ห่างจากจุดระบายน้ำทิ้ง 500 เมตร						
Date Analysis Commenced	Oct 05, 2022						
Condition of Sample	Contained in one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47120	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	8.2	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.7	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.8	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.6	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	34500	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	3	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.4	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	1.2	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Pitthaya Thongtaeng

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22114802

Date Received : Oct 05, 2022

Date Reported : Oct 12, 2022

Report Number : 2436489-1

Page 6 of 8

Sample Number	22114802-5
Sampled Date	Oct 05, 2022 10:55 AM
Sample Description	Sea Water
Location	สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
Date Analysis Commenced	Oct 05, 2022
Condition of Sample	Contained in one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46530	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	8.2	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.9	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.5	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	30.9	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	33950	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	2	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	1.8	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	1.9	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Pitthaya Thongtaeng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by

N. Banachkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22114802

Date Received : Oct 05, 2022

Date Reported : Oct 12, 2022

Report Number : 2436489-1

Page 7 of 8

Sample Number	22114802-6
Sampled Date	Oct 05, 2022 10:20 AM
Sample Description	Sea Water
Location	สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
Date Analysis Commenced	Oct 05, 2022
Condition of Sample	Contained in one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46990	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.8	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.7	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	30.8	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	31.5	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	35100	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	<2	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.4	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	1.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Pitthaya Thongtaeng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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N. Banachkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22114802

Date Received : Oct 05, 2022

Date Reported : Oct 12, 2022

Report Number : 2436489-1

Page 8 of 8

Sample Number	22114802-7
Sampled Date	Oct 05, 2022 11:05 AM
Sample Description	Sea Water
Location	สถานี C อู่ท่าอากาศยานน้ำทั้ง 1,000 เมตร
Date Analysis Commenced	Oct 05, 2022
Condition of Sample	Contained in one BOD bottle and two plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46590	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	8.3	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	29.8	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	30.3	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	35300	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	3	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	1.9	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	1.3	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Pittahaya Thongtaeng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22133161

Date Received : Nov 02, 2022

Date Reported : Jan 14, 2023

Report Number : 2479139-1 C2

Page 1 of 1

Sample Number	22133161-1
Sampled Date	Nov 02, 2022 11:25 AM
Sample Description	Seawater
Location	สถานี I บริเวณใกล้จุดสูบน้ำเข้าไม่ไหลขึ้น
Date Analysis Commenced	Nov 02, 2022
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	52500	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.6	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	8.2	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	28.5	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	29.4	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32000	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	<2	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	1.8	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	2.3	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Wanlop Hunchainaow

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
Supervisor

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19584-21/ EMAIL



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22133171

Date Received : Nov 02, 2022

Date Reported : Jan 14, 2023

Report Number : 2479180-1 C2

Page 1 of 1

Sample Number	22133171-1						
Sampled Date	Nov 02, 2022 10:20 AM						
Sample Description	Seawater						
Location	สถานี D อู่ท่าจตุรภพประมาตนาฬิก 500 เมตร						
Date Analysis Commenced	Nov 02, 2022						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	51910	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.5	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	29.2	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	30.0	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32750	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	3	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.0	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	2.3	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Wanlop Hunchainao

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchoangkit

Narumon Banchoangkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22133172

Date Received : Nov 02, 2022

Date Reported : Jan 14, 2023

Report Number : 2479178-1 C2

Page 1 of 1

Sample Number	22133172-1						
Sampled Date	Nov 02, 2022 10:25 AM						
Sample Description	Seawater						
Location	สถานี D อู่ท่าจตุรภพประมาตนาฬิก 500 เมตร						
Date Analysis Commenced	Nov 02, 2022						
Condition of Sample	Contained in three plastic bottles and one BOD bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	52600	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.5	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.9	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	29.4	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	30.3	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32000	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	4	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.0	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	2.9	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Wanlop Hunchainao

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchoangkit

Narumon Banchoangkit
Supervisor

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Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22133173

Date Received : Nov 02, 2022

Date Reported : Jan 14, 2023

Report Number : 2479175-1 C2

Page 1 of 1

Sample Number	22133173-1						
Sampled Date	Nov 02, 2022 10:40 AM						
Sample Description	Seawater						
Location	สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร						
Date Analysis Commenced	Nov 02, 2022						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	52540	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.7	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	8.1	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	29.7	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	29.3	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	31750	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	3	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.0	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	2.5	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Wanlop Hunchainaw

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banmait

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22133174

Date Received : Nov 02, 2022

Date Reported : Jan 14, 2023

Report Number : 2479171-1 C2

Page 1 of 1

Sample Number	22133174-1						
Sampled Date	Nov 02, 2022 10:10 AM						
Sample Description	Seawater						
Location	สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร						
Date Analysis Commenced	Nov 02, 2022						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	52460	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.5	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C	-	-	-	7.9	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	29.1	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	30.6	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32600	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	2	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.2	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	2.8	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Wanlop Hunchainaw

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banmait

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22133175

Date Received : Nov 02, 2022

Date Reported : Jan 14, 2023

Report Number : 2479153-1 C2

Page 1 of 1

Sample Number	22133175-1						
Sampled Date	Nov 02, 2022 11:04 AM						
Sample Description	Seawater						
Location	สถานี C อ่าวจากจุดระยะน้ำห่าง 1,000 เมตร						
Date Analysis Commenced	Nov 02, 2022						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	52410	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.8	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C		-	-	8.2	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	29.0	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	28.9	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32300	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	<2	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.3	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	2.0	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Wanlop Hunchainaow

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banachkit

Narumon Banachkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22133178

Date Received : Nov 02, 2022

Date Reported : Jan 14, 2023

Report Number : 2479183-1 C2

Page 1 of 1

Sample Number	22133178-1						
Sampled Date	Nov 02, 2022 10:30 AM						
Sample Description	Seawater						
Location	สถานี E บริเวณโถงจุดระยะน้ำห่าง						
Date Analysis Commenced	Nov 02, 2022						
Condition of Sample	Contained in one amber glass bottle, one BOD bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	APHA (2017), 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	52290	No Standard	Based on APHA (2017), 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.7	>4	Based on APHA (2017), 4500-O(C)	Rayong
pH at 25 degree C		-	-	8.1	7.0-8.5	Based on APHA (2017), 4500-H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Based on APHA (2017), 4500-Cl(F)	Rayong
Salinity	ppt	-	0.1	28.8	Change from lower salinity not more than 10%	Based on APHA (2017), 2520 B	Rayong
Temperature	Degree C	-	-	29.8	Change from natural condition not more than 2 degree C	Based on APHA (2017), 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	32700	No Standard	APHA (2017), 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	2	No Standard	APHA (2017), 2540 D	Rayong
Transparency	m	-	-	2.0	Change from Natural condition not more than 10% of the lowest transparency	NIOSH (1994)	Rayong
Turbidity	NTU	-	0.1	3.9	No Standard	Based on APHA (2017), 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Wanlop Hunchainaow

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banachkit

Narumon Banachkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22145970

Date Received : Dec 07, 2022

Date Reported : Jan 14, 2023

Report Number : 2509724-1 C2

Page 1 of 2

Sample Number	22145970-1
Sampled Date	Dec 07, 2022 2:02 PM
Sample Description	Seawater
Location	สถานี I บริเวณใกล้จุดสูบน้ำไปทะเลตื้น
Date Analysis Commenced	Dec 07, 2022
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47030	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.9	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	28.6	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.6	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30150	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	<2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Approved by

N. Banngkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22145970

Date Received : Dec 07, 2022

Date Reported : Jan 14, 2023

Report Number : 2509724-1 C2

Page 2 of 2

Sample Number	22145970-1
Sampled Date	Dec 07, 2022 2:02 PM
Sample Description	Seawater
Location	สถานี I บริเวณใกล้จุดสูบน้ำไปทะเลตื้น
Date Analysis Commenced	Dec 07, 2022
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.5	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	2.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banngkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22145974

Date Received : Dec 07, 2022

Date Reported : Jan 14, 2023

Report Number : 2509727-1 C2

Page 1 of 2

Sample Number	22145974-1
Sampled Date	Dec 07, 2022 2:34 PM
Sample Description	Seawater
Location	สถานี E บริเวณใกล้จุดระบายน้ำทิ้ง
Date Analysis Commenced	Dec 07, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46930	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.7	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	7.4	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	28.5	Change from lower salinity not more than 10%	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	32.5	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30000	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22145974

Date Received : Dec 07, 2022

Date Reported : Jan 14, 2023

Report Number : 2509727-1 C2

Page 2 of 2

Sample Number	22145974-1
Sampled Date	Dec 07, 2022 2:34 PM
Sample Description	Seawater
Location	สถานี E บริเวณใกล้จุดระบายน้ำทิ้ง
Date Analysis Commenced	Dec 07, 2022
Condition of Sample	Contained in one BOD bottle, one amber glass bottle and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.4	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	4.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22145980

Date Received : Dec 07, 2022

Date Reported : Jan 14, 2023

Report Number : 2509733-1 C2

Page 1 of 2

Sample Number	22145980-1						
Sampled Date	Dec 07, 2022 2:24 PM						
Sample Description	Seawater						
Location	สถานี A อู่ท่าเรืออุตสาหกรรมน้ำหึ่ง 500 เมตร						
Date Analysis Commenced	Dec 07, 2022						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46970	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.8	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	7.7	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	28.5	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	31.3	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30800	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Approved by

N. Banachit

Narumon Banachongkit
Supervisor

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P/O : GLOW-OM-22-103

Project Name :

Project Location: GHECO-ONE

Lot ID: 22145980

Date Received : Dec 07, 2022

Date Reported : Jan 14, 2023

Report Number : 2509733-1 C2

Page 2 of 2

Sample Number	22145980-1						
Sampled Date	Dec 07, 2022 2:24 PM						
Sample Description	Seawater						
Location	สถานี A อู่ท่าเรืออุตสาหกรรมน้ำหึ่ง 500 เมตร						
Date Analysis Commenced	Dec 07, 2022						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.5	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banachit

Narumon Banachongkit
Supervisor

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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 22145983
Date Received : Dec 07, 2022
Date Reported : Jan 14, 2023
Report Number : 2509736-1 C2

Page 1 of 2

Sample Number	22145983-1
Sampled Date	Dec 07, 2022 2:28 PM
Sample Description	Seawater
Location	สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
Date Analysis Commenced	Dec 07, 2022
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	47050	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.9	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	7.9	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	28.4	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	31.0	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30750	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 22145983
Date Received : Dec 07, 2022
Date Reported : Jan 14, 2023
Report Number : 2509736-1 C2

Page 2 of 2

Sample Number	22145983-1
Sampled Date	Dec 07, 2022 2:28 PM
Sample Description	Seawater
Location	สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
Date Analysis Commenced	Dec 07, 2022
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.4	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	3.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banchongkit

Narumon Banchongkit
Supervisor

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22145987

Date Received : Dec 07, 2022

Date Reported : Jan 14, 2023

Report Number : 2509741-1 C2

Page 1 of 2

Sample Number	22145987-1						
Sampled Date	Dec 07, 2022 2:44 PM						
Sample Description	Seawater						
Location	สถานี O อยู่ห่างจากจุดระแนงน้ำทั้ง 500 เมตร						
Date Analysis Commenced	Dec 07, 2022						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46620	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	7.3	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C		-	-	8.2	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	28.2	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	30.8	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30900	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22145987

Date Received : Dec 07, 2022

Date Reported : Jan 14, 2023

Report Number : 2509741-1 C2

Page 2 of 2

Sample Number	22145987-1						
Sampled Date	Dec 07, 2022 2:44 PM						
Sample Description	Seawater						
Location	สถานี O อยู่ห่างจากจุดระแนงน้ำทั้ง 500 เมตร						
Date Analysis Commenced	Dec 07, 2022						
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.0	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	5.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banngkit

Narumon Banchoangkit
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P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 22145996
Date Received : Dec 07, 2022
Date Reported : Jan 14, 2023
Report Number : 2509749-1 C2

Page 1 of 2

Sample Number	22145996-1
Sampled Date	Dec 07, 2022 2:18 PM
Sample Description	Seawater
Location	สถานี B อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร
Date Analysis Commenced	Dec 07, 2022
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Rayong
Conductivity at 25 Degree C	micromhos/cm	-	0.5	46960	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Dissolved Oxygen	mg/L	-	0.1	6.7	>4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Rayong
pH at 25 degree C	-	-	-	7.7	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine	mg/L	-	0.01	<0.01	≤0.01	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong
Salinity	ppt	-	0.1	28.0	Change from lower salinity not more than 10%	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2510 B	Rayong
Temperature	Degree C	-	-	32.1	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	30600	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	2	2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

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N. Banongkit

Narumon Banchongkit
Supervisor

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location: GHECO-ONE

Lot ID: 22145996
Date Received : Dec 07, 2022
Date Reported : Jan 14, 2023
Report Number : 2509749-1 C2

Page 2 of 2

Sample Number	22145996-1
Sampled Date	Dec 07, 2022 2:18 PM
Sample Description	Seawater
Location	สถานี B อยู่ห่างจากจุดระบายน้ำถึง 1,000 เมตร
Date Analysis Commenced	Dec 07, 2022
Condition of Sample	Contained in one BOD bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Transparency	m	-	-	1.5	Change from Natural condition not more than 10% of the lowest transparency	Visual Method	Rayong
Turbidity	NTU	-	0.1	2.7	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Rayong

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 5)

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

N. Banongkit

Narumon Banchongkit
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ภาคผนวก ค-8

ตะกอนดินและเนื้อเยื่อสัตว์น้ำ



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location :

Lot ID: 22107341

Date Received : Sep 14, 2022

Date Reported : Oct 06, 2022

Report Number : 2419167-1

Page 1 of 2

Sample Number	22107341-1
Sampled Date	Sep 14, 2022 10:22 AM
Sample Description	การปนเปื้อนโลหะหนักในตะกอนดิน
Location	สถานี E บริเวณโถงใต้สถานีเพื่อขุดลอก
Date Analysis Commenced	Sep 16, 2022
Condition of Sample	Packed in one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic (Dry basis)	mg/kg	-	0.50	<0.50	≤7	Based on US EPA, Method 3050B and 6010D	Bangkok
Cadmium (Dry basis)	mg/kg	-	0.50	<0.50	≤2	Based on US EPA, Method 3050B and 6010D	Bangkok
Iron (Dry basis)	mg/kg	-	1.00	11597	No Standard	Based on US EPA, Method 3050B and 6010D	Bangkok
Lead (Dry basis)	mg/kg	-	1.00	28.6	≤52	Based on US EPA, Method 3050B and 6010D	Bangkok
Mercury (Dry basis)	mg/kg	-	0.10	0.17	≤0.4	US EPA (2007), Method 7473	Bangkok
Selenium (Dry Basis)	mg/kg	-	0.50	<0.50	No Standard	Based on US EPA, Method 3050B and 6010D	Bangkok

Guideline : ประกาศกรมควบคุมมลพิษ เรื่องกำหนดหลักเกณฑ์คุณภาพตะกอนดินท้ายฝั่งทะเล

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Sawitree N.

Sawitree Noisangiam
Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location :

Lot ID: 22107341

Date Received : Sep 14, 2022

Date Reported : Oct 06, 2022

Report Number : 2419167-1

Page 2 of 2

Sample Number	22107341-2
Sampled Date	Sep 14, 2022 11:22 AM
Sample Description	การปนเปื้อนโลหะหนักในตะกอนดิน
Location	สถานี E บริเวณโถงใต้สถานีเพื่อขุดลอก
Date Analysis Commenced	Sep 16, 2022
Condition of Sample	Packed in one plastic bag, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Arsenic (Dry basis)	mg/kg	-	0.50	<0.50	≤7	Based on US EPA, Method 3050B and 6010D	Bangkok
Cadmium (Dry basis)	mg/kg	-	0.50	<0.50	≤2	Based on US EPA, Method 3050B and 6010D	Bangkok
Iron (Dry basis)	mg/kg	-	1.00	2369	No Standard	Based on US EPA, Method 3050B and 6010D	Bangkok
Lead (Dry basis)	mg/kg	-	1.00	4.65	≤52	Based on US EPA, Method 3050B and 6010D	Bangkok
Mercury (Dry basis)	mg/kg	-	0.10	<0.10	≤0.4	US EPA (2007), Method 7473	Bangkok
Selenium (Dry Basis)	mg/kg	-	0.50	<0.50	No Standard	Based on US EPA, Method 3050B and 6010D	Bangkok

Guideline : ประกาศกรมควบคุมมลพิษ เรื่องกำหนดหลักเกณฑ์คุณภาพตะกอนดินท้ายฝั่งทะเล

Sampled By : Paramet Sattayakun

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Sawitree N.

Sawitree Noisangiam
Manager

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สถานีวิจัยประมงศรีราชา

101/12 หมู่ 9 ต. บางพระ

อ. ศรีราชา จ. ชลบุรี 20110

โทร./โทรสาร. (038) 311379

ผลการวิเคราะห์โลหะหนักในเนื้อเยื่อสัตว์น้ำ โครงการ GHECO-ONE

ทำการสำรวจสัตว์น้ำ โดยการสุ่มเก็บตัวอย่างด้วยเครื่องมือทำการประมง เช่น เบ็ดและอวน เป็นต้น (ภาพที่ 1-4) ระหว่างเวลา 09.00 น. – 15.00 น. ในวันที่ 14 กันยายน 2565 บริเวณใกล้จุดสูบน้ำของโครงการ จุด 1 (732700E, 1401845N) และบริเวณแหล่งรองรับน้ำทิ้งของโครงการ จุด E (731880E, 1401330N) เพื่อเก็บตัวอย่างสัตว์น้ำไปวิเคราะห์หาปริมาณโลหะหนักในเนื้อเยื่อสัตว์น้ำ

จากการสำรวจบริเวณใกล้จุดสูบน้ำของโครงการ จุด 1 เนื่องจากเป็นบริเวณที่มีการสัญจรเข้าออกไปมาของเรือรับส่งสินค้าจำนวนมากจึงทำการวางอวนได้ยากและเป็นเขตหวงห้ามการทำการประมงของท่าเรือนิคมอุตสาหกรรมมาบตาพุด จึงทำการวางอวนได้ในระยะเวลาเพียงสั้นๆเท่านั้น ดังนั้นจึงเลือกใช้เครื่องมือประมงประเภทเบ็ดควงคู่ไปด้วย ซึ่งจากการสำรวจพบสัตว์น้ำพวกปลาหลากหลายชนิด แต่เนื่องจากข้อจำกัดของปริมาณเนื้อเยื่อสัตว์น้ำแต่ละชนิดที่ใช้สำหรับวิเคราะห์หาปริมาณโลหะหนักนั้น ต้องมีน้ำหนักไม่ต่ำกว่า 300 กรัม จึงทำการคัดเลือกสัตว์น้ำจำนวน 3 ชนิด ได้แก่ ปลาสิกัน (*Alepes djedaba*), ปลาแมว (*Thyssa hamiltonii*) และปลาจวด (*Nibea soldado*) ส่วนบริเวณแหล่งรองรับน้ำทิ้งของโครงการ จุด E ใช้เครื่องมือทำการประมงประเภทอวนกึ่งและเบ็ด ซึ่งจากการสำรวจพบสัตว์น้ำพวกปลาหลากหลายชนิด แต่เนื่องจากข้อจำกัดของปริมาณเนื้อเยื่อสัตว์น้ำแต่ละชนิดที่ใช้สำหรับวิเคราะห์หาปริมาณโลหะหนักนั้น ต้องมีน้ำหนักไม่ต่ำกว่า 300 กรัม จึงทำการคัดเลือกสัตว์น้ำจำนวน 3 ชนิด ได้แก่ ปลาจู้ยจิน (*Carangoides armatus*), ปลาสิกัน (*Alepes djedaba*) และปลาทุ (*Rastrelliger brachysoma*) (ภาพที่ 5-9)

ผลการทดสอบโลหะหนักในเนื้อเยื่อสัตว์น้ำบริเวณใกล้จุดสูบน้ำของโครงการ จุด 1 ได้แก่ ปลาสิกัน, ปลาแมว และปลาจวด ซึ่งผลการทดสอบโลหะหนักในเนื้อเยื่อของปลาสิกัน พบว่ามีค่า iAs, Cd, Fe, Pb, Hg และ Se เท่ากับ ไม่สามารถตรวจวัดค่าได้, ไม่สามารถตรวจวัดค่าได้, 8.98, ไม่สามารถตรวจวัดค่าได้, 0.07 และ 0.51 มิลลิกรัม/กิโลกรัม ตามลำดับ ส่วนในปลาแมว พบว่ามีค่า iAs, Cd, Fe, Pb, Hg และ Se เท่ากับ ไม่สามารถตรวจวัดค่าได้, ไม่สามารถตรวจวัดค่าได้, 3.91, ไม่สามารถตรวจวัดค่าได้, 0.14 และ 0.48 มิลลิกรัม/กิโลกรัม ตามลำดับ และปลาจวด พบว่ามีค่า iAs, Cd, Fe, Pb, Hg และ Se เท่ากับ ไม่สามารถตรวจวัดค่าได้, ไม่สามารถตรวจวัดค่าได้, 2.67, ไม่สามารถตรวจวัดค่าได้, 0.15

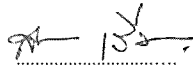
และ 0.51 มิลลิกรัม/กิโลกรัม ตามลำดับ ซึ่งมีค่าไม่เกินมาตรฐานที่กำหนดเมื่อเทียบกับค่ามาตรฐานอ้างอิงจาก IAEA(2003) และเมื่อเทียบกับค่ามาตรฐานตามประกาศกระทรวงสาธารณสุข (ฉบับที่ 414) พ.ศ. 2563 (ตารางที่ 1)

ส่วนผลการทดสอบโลหะหนักในเนื้อเยื่อสัตว์น้ำบริเวณแหล่งรองรับน้ำทิ้งของโครงการ จุด E ได้แก่ ปลาจู้ยจิน, ปลาสิกัน และปลาทุ ซึ่งผลการทดสอบโลหะหนักในเนื้อเยื่อของปลาจู้ยจิน พบว่ามีค่า iAs, Cd, Fe, Pb, Hg และ Se เท่ากับ ไม่สามารถตรวจวัดค่าได้, ไม่สามารถตรวจวัดค่าได้, 2.74, ไม่สามารถตรวจวัดค่าได้, 0.05 และ 0.55 มิลลิกรัม/กิโลกรัม ตามลำดับ ส่วนในปลาสิกัน พบว่ามีค่า iAs, Cd, Fe, Pb, Hg และ Se เท่ากับ ไม่สามารถตรวจวัดค่าได้, ไม่สามารถตรวจวัดค่าได้, 8.31, ไม่สามารถตรวจวัดค่าได้, 0.06 และ 0.52 มิลลิกรัม/กิโลกรัม ตามลำดับ และปลาทุ พบว่ามีค่า iAs, Cd, Fe, Pb, Hg และ Se เท่ากับ <0.05, ไม่สามารถตรวจวัดค่าได้, 11.20, <0.10, 0.02 และ 0.79 มิลลิกรัม/กิโลกรัม ตามลำดับ ซึ่งมีค่าไม่เกินมาตรฐานที่กำหนดเมื่อเทียบกับค่ามาตรฐานอ้างอิงจาก IAEA(2003) และเมื่อเทียบกับค่ามาตรฐานตามประกาศกระทรวงสาธารณสุข (ฉบับที่ 414) พ.ศ. 2563 (ตารางที่ 1)

ตารางที่ 1 : ผลการทดสอบโลหะหนักในเนื้อเยื่อสัตว์น้ำ

รายการ ตรวจวัด	บริเวณจุดตรวจวัด	ชนิดสัตว์น้ำ	ผลการตรวจวัด (มิลลิกรัม/กิโลกรัม)					
			iAs	Cd	Fe	Pb	Hg	Se
เนื้อเยื่อสัตว์น้ำ	บริเวณใกล้จุดสูบน้ำ	ปลาสร้อย	ND ¹	ND ¹	8.98	ND ¹	0.07	0.51
	ของโครงการ จุด I	ปลาแมว	ND ¹	ND ¹	3.91	ND ¹	0.14	0.48
	(732700E, 1401845N)	ปลาจวด	ND ¹	ND ¹	2.67	ND ¹	0.15	0.51
	บริเวณแหล่งรองรับน้ำทิ้ง	ปลาช่อน	ND ¹	ND ¹	2.74	ND ¹	0.05	0.55
	ของโครงการ จุด E	ปลาสร้อย	ND ¹	ND ¹	8.31	ND ¹	0.06	0.52
	(731880E, 1401330N)	ปลาทุ	<0.05	ND ¹	11.20	<0.10	0.02	0.79
ค่ามาตรฐาน ²			-	<0.189	<146	<0.12	<0.222	<2.83
ค่ามาตรฐาน ³			2.00	1.00	-	0.30	0.50	-

- หมายเหตุ :
- 1. ¹ ND = Not Detected (ไม่สามารถตรวจวัดค่าได้)
 - 2. ² ค่ามาตรฐานอ้างอิงจาก IAEA(2003)
 - 3. ³ ค่ามาตรฐานตามประกาศกระทรวงสาธารณสุข (ฉบับที่ 414) พ.ศ. 2563



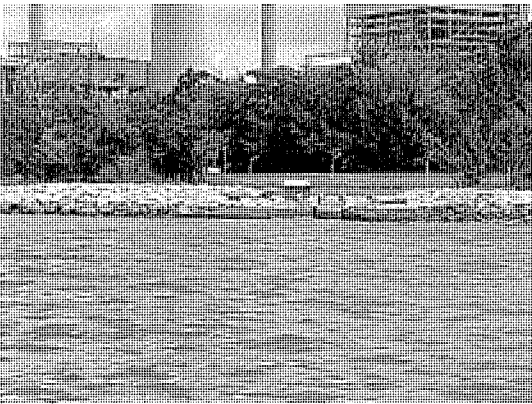
(นายสารโรจน์ เร่มคำริห์)
ผู้วิเคราะห์



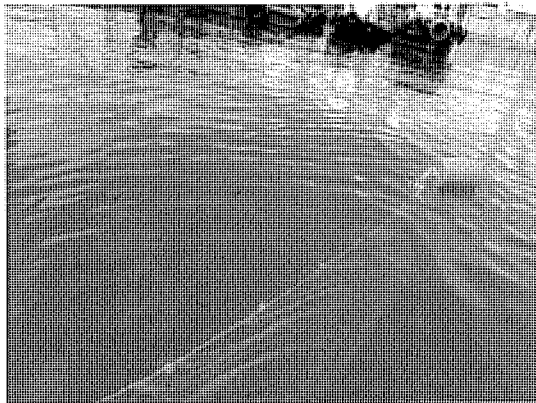
(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา



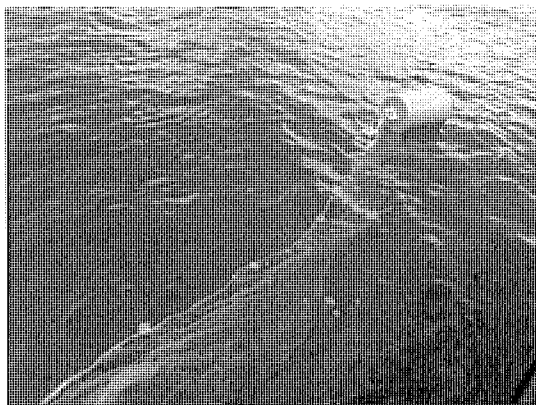
ภาพที่ 1 สภาพทั่วไปบริเวณใกล้จุดสูบน้ำของโครงการ (จุด I)



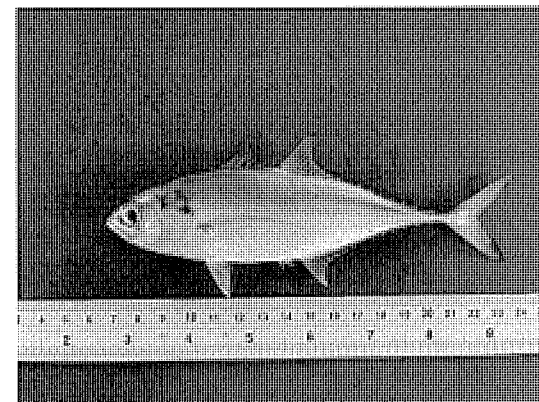
ภาพที่ 2 สภาพทั่วไปบริเวณแหล่งรองรับน้ำทิ้งของโครงการ (จุด E)



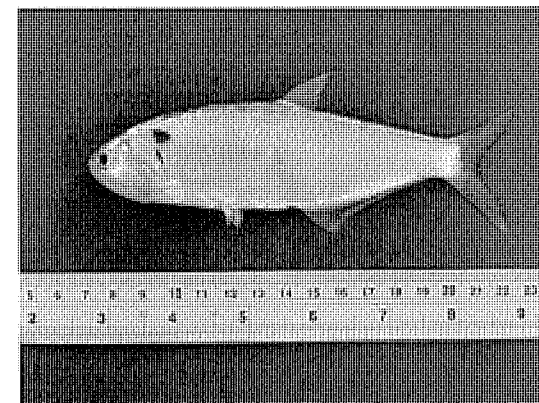
ภาพที่ 3 การวางอวนเพื่อเก็บตัวอย่างสัตว์น้ำ (จุด I)



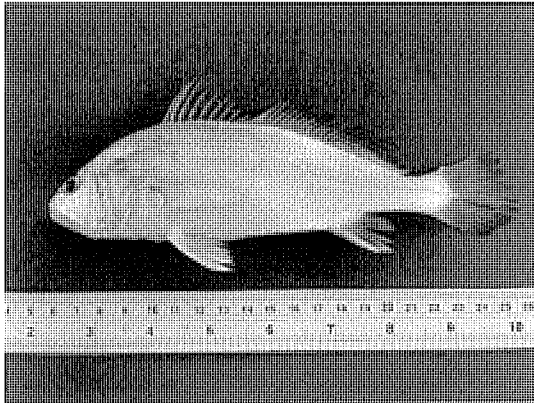
ภาพที่ 4 การวางอวนเพื่อเก็บตัวอย่างสัตว์น้ำ (จุด E)



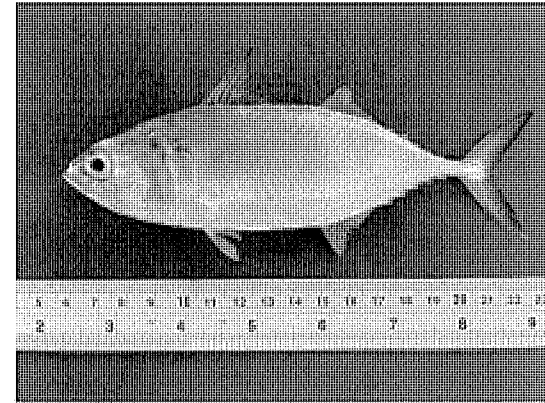
ภาพที่ 5 ชื่อวิทยาศาสตร์ : *Alepes djedaba*
ชื่อไทย : สีกุน ชื่อสามัญ : Shrimp scad



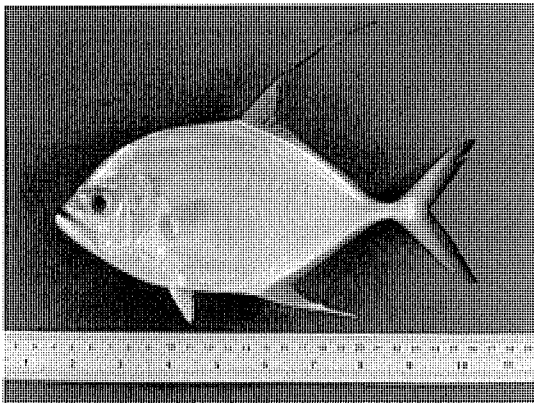
ภาพที่ 6 ชื่อวิทยาศาสตร์ : *Thryssa hamiltonii*
ชื่อไทย : แมว ชื่อสามัญ : Hamilton's thryssa



ภาพที่ 7 ชื่อวิทยาศาสตร์ : *Nibea soldado*
ชื่อไทย : จวด ชื่อสามัญ : Soldier croaker



ภาพที่ 9 ชื่อวิทยาศาสตร์ : *Rastrelliger brachysoma*
ชื่อไทย : ทุ ชื่อสามัญ : Short mackerel



ภาพที่ 8 ชื่อวิทยาศาสตร์ : *Carangoides armatus*
ชื่อไทย : จ๋วยจีน ชื่อสามัญ : Longfin trevally

ภาคผนวก ค-9

ทรัพยากรชีวภาพทางทะเล



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : GHECO-ONE COMPANY LIMITED.

Address : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Location : GHECO-ONE

รายงานผลการวิเคราะห์แพลงก์ตอนพืช

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 14 กันยายน 2565)

สกุลแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	22102536-1	22102536-2	22102536-3	22102536-4	22102536-5	22102536-6
Division Cyanophyta						
Class Cyanophyceae						
Order Nostocales						
Family Oscillatoriaceae						
1. <i>Oscillatoria</i> sp. (สาข)	58,000	634,000	16,000	134,000	125,000	-
Family Nostocaceae						
2. <i>Pseudanabaena</i> sp.	69,000	44,000	128,000	32,000	-	9,000
Division Chlorophyta						
Class Chlorophyceae						
Order Chlorococcales						
Family Scenedesmaceae						
3. <i>Scenedesmus</i> sp.	-	-	-	-	8,000	-
Order Ulotrichales						
Family Ulotrichaceae						
4. <i>Geminella</i> sp.	-	-	-	-	17,000	17,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 14 กันยายน 2565)

(ต่อ)

สกุลแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	22102536-1	22102536-2	22102536-3	22102536-4	22102536-5	22102536-6
Division Chromophyta						
Class Bacillariophyceae						
Order Biddulphiales						
Suborder Coscinodiscineae						
Family Thalassiosiraceae						
5. <i>Cyclotella</i> sp.	519,000	352,000	401,000	288,000	167,000	239,000
6. <i>Lauderia</i> sp. (สาข)	-	35,000	96,000	-	-	-
7. <i>Skeletonema</i> sp. (สาข)	-	26,000	-	115,000	67,000	-
8. <i>Thalassiosira</i> sp.	500,000	370,000	187,000	614,000	34,000	257,000
Family Melosiraceae						
9. <i>Melosira</i> sp.	-	-	-	26,000	-	-
Family Aulacoseiraceae						
10. <i>Aulacodiscus</i> sp. (สาข)	10,000	-	-	-	-	-
Family Leptocylindraceae						
11. <i>Corethron</i> sp.	118,000	88,000	214,000	179,000	75,000	77,000
Family Coscinodiscaceae						
12. <i>Coscinodiscus</i> sp.	98,000	79,000	64,000	275,000	8,000	44,000
13. <i>Paralia</i> sp. (สาข)	-	-	-	13,000	-	-
Family Asterolampraceae						
14. <i>Asterolampra</i> sp.	20,000	-	16,000	32,000	-	26,000
15. <i>Asteromphalus</i> sp.	-	9,000	-	-	-	9,000
Family Hemidiscaceae						
16. <i>Actinoptychus</i> sp.	-	18,000	27,000	32,000	8,000	-
Suborder Rhizosoleniineae						
Family Rhizosoleniaceae						
17. <i>Dactyliosolen</i> sp.	29,000	-	284,000	160,000	67,000	-
18. <i>Guinardia</i> sp.	26,264,000	1,778,000	14,339,000	29,312,000	317,000	1,915,000

ตาราง ผลการวิเคราะห์เพลงก่ตอนพืช (เก็บตัวอย่างวันที่ 14 กันยายน 2565)

(ต่อ)

สกุลเพลงก่ตอนพืช	ปริมาณเพลงก่ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	22102536-1	22102536-2	22102536-3	22102536-4	22102536-5	22102536-6
19. <i>Proboscia</i> sp.	-	79,000	32,000	26,000	142,000	-
20. <i>Pseudosolenia</i> sp.	-	9,000	43,000	109,000	-	-
21. <i>Rhizosolenia</i> sp.	756,000	273,000	359,000	1,221,000	59,000	61,000
Suborder Biddulphiineae						
Family Hemiaulaceae						
22. <i>Cerataulina</i> sp. (สาข)	725,000	80,000	894,000	1,197,000	593,000	68,000
23. <i>Climacodium</i> sp. (สาข)	20,000	18,000	80,000	128,000	-	-
24. <i>Eucampia</i> sp. (สาข)	451,000	79,000	690,000	147,000	-	9,000
25. <i>Hemiaulus</i> sp. (สาข)	78,000	79,000	348,000	762,000	-	-
Family Chaetoceraceae						
26. <i>Bacteriastrum</i> sp. (สาข)	1,039,000	897,000	1,076,000	691,000	-	34,000
27. <i>Chaetoceros</i> sp. (สาข)	5,243,000	4,568,000	5,212,000	9,114,000	542,000	974,000
Family Lithodesmaceae						
28. <i>Dietylum</i> sp.	39,000	53,000	139,000	32,000	142,000	26,000
29. <i>Helicotheca</i> sp.	-	-	27,000	-	33,000	-
Family Eupodiscaceae						
30. <i>Odontella</i> sp.	108,000	132,000	5,000	89,000	25,000	26,000
Order Bacillariales						
Suborder Fragilariineae						
Family Thalassionemataceae						
31. <i>Thalassionema</i> sp.	412,000	123,000	348,000	1,088,000	743,000	103,000
Family Licmophoriaceae						
32. <i>Licmophora</i> sp.	108,000	-	-	13,000	8,000	9,000
Suborder Bacillariineae						
Family Naviculaceae						
33. <i>Amphora</i> sp.	49,000	18,000	86,000	435,000	33,000	17,000
34. <i>Diploneis</i> sp.	10,000	-	-	6,000	-	-

ตาราง ผลการวิเคราะห์เพลงก่ตอนพืช (เก็บตัวอย่างวันที่ 14 กันยายน 2565)

(ต่อ)

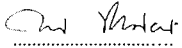
สกุลเพลงก่ตอนพืช	ปริมาณเพลงก่ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	22102536-1	22102536-2	22102536-3	22102536-4	22102536-5	22102536-6
35. <i>Meunier</i> sp.	147,000	35,000	16,000	211,000	-	120,000
36. <i>Navicula</i> sp.	-	26,000	-	-	-	-
37. <i>Pleurosigma</i> sp.	108,000	150,000	-	269,000	41,000	26,000
38. <i>Trachyneis</i> sp.	-	-	-	26,000	-	-
Family Bacillariaceae						
39. <i>Cylindrotheca</i> sp.	147,000	-	-	-	-	17,000
40. <i>Nitzschia</i> sp.	-	-	-	-	25,000	-
41. <i>Pseudo-nitzschia</i> sp. (สาข)	-	-	48,000	45,000	58,000	-
Family Surirellaceae						
42. <i>Surirella</i> sp.	59,000	-	-	-	-	-
Class Dictyochophyceae						
Order Dictyochaes						
Family Dictyochophyceae						
43. <i>Dictyocha</i> sp.	-	-	-	-	-	9,000
Class Dinophyceae						
Order Prorocentrales						
Family Prorocentraceae						
44. <i>Prorocentrum</i> sp.	-	35,000	128,000	-	33,000	-
Order Dinophysiales						
Family Dinophysiaceae						
45. <i>Dinophysis</i> sp.	304,000	18,000	107,000	70,000	-	-
46. <i>Phalacroma</i> sp.	29,000	-	-	6,000	-	-
Order Gymnodiniales						
Family Gymnodiniaceae						
47. <i>Gymnodinium</i> sp.	20,000	-	-	-	-	-
48. <i>Gyrodinium</i> sp.	176,000	-	134,000	-	-	34,000

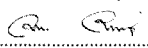
ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 14 กันยายน 2565)

(ต่อ)

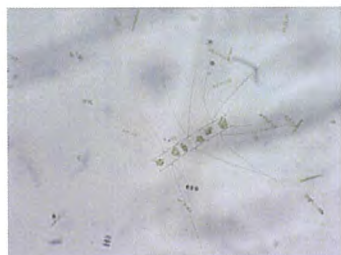
สกุลแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)					
	22102536-1	22102536-2	22102536-3	22102536-4	22102536-5	22102536-6
Order Noctilucales						
Family Noctiluaceae						
49. <i>Noctiluca</i> sp.	-	9,000	-	-	-	-
Order Gonyaulacales						
Family Ceratiaceae						
50. <i>Ceratium</i> sp.	49,000	-	96,000	-	-	-
Family Goniomomaceae						
51. <i>Goniomoma</i> sp.	216,000	-	-	-	-	-
Family Pyrophacaceae						
52. <i>Pyrophacus</i> sp.	59,000	-	-	-	-	-
Order Peridiniales						
Family Peridiniaceae						
53. <i>Peridinium</i> sp.	-	18,000	43,000	-	-	9,000
Family Protoperidiniaceae						
54. <i>Protoperidinium</i> sp.	206,000	18,000	134,000	103,000	50,000	43,000
ชนิดแพลงก์ตอนพืช	35	32	33	35	26	26
ปริมาณแพลงก์ตอนพืช	38,243,000	10,150,000	25,817,000	47,000,000	3,420,000	4,178,000
ดัชนีความหลากหลายแพลงก์ตอนพืช	1.3486	2.0158	1.6831	1.4330	2.5075	1.8742
ดัชนีความสม่ำเสมอแพลงก์ตอนพืช	0.3793	0.5816	0.4814	0.4031	0.7696	0.5752

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment- preservation standards (APHA, USEPA)

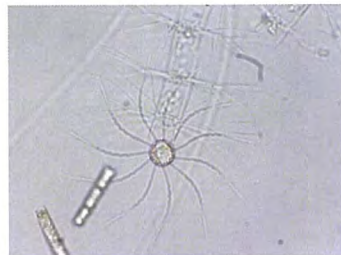

(นางสาวกนกวรรณ ขวาค่อน)
ผู้วิเคราะห์


(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

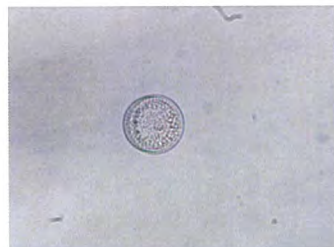
Sample Location : 1. สถานี 22102536-1 : สถานี A อยู่ห่างจากจุดระบายน้ำทิ้ง 500 เมตร
2. สถานี 22102536-2 : สถานี B อยู่ห่างจากจุดระบายน้ำทิ้ง 1,000 เมตร
3. สถานี 22102536-3 : สถานี C อยู่ห่างจากจุดระบายน้ำทิ้ง 1,000 เมตร
4. สถานี 22102536-4 : สถานี D อยู่ห่างจากจุดระบายน้ำทิ้ง 500 เมตร
5. สถานี 22102536-5 : สถานี I บริเวณใกล้จุดสูบเพื่อนำไปหล่อเย็น
6. สถานี 22102536-6 : สถานี O อยู่ห่างจากจุดระบายน้ำทิ้ง 500 เมตร



Chaetoceros sp.



Bacteriastrum sp.



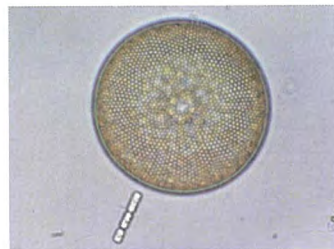
Cyclotella sp.



Guinardia sp.



Rhizosolenia sp.



Coscinodiscus sp.



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : GHECO-ONE COMPANY LIMITED.

Address : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Location : GHECO-ONE

รายงานผลการวิเคราะห์แพลงก์ตอนสัตว์

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 14 กันยายน 2565)

สกุล/กลุ่มแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)					
	22102536-1	22102536-2	22102536-3	22102536-4	22102536-5	22102536-6
Phylum Protozoa						
Subphylum Ciliophora						
Class Ciliata						
Subclass Spirotricha						
Order Tintinnida						
Family Tintinnididae						
1. <i>Leprotintinnus</i> sp.	-	-	-	6,000	-	-
2. <i>Tintinnidium</i> sp.	-	-	-	6,000	-	-
Family Codonellidae						
3. <i>Tintinnopsis</i> sp.	29,000	18,000	10,000	12,000	125,000	77,000
Family Codonellopsidae						
4. <i>Codonellopsis</i> sp.	10,000	9,000	-	-	-	-
Family Tintinnidae						
5. <i>Anphorella</i> sp.	-	-	-	6,000	-	-

ตาราง ผลการวิเคราะห์แฟลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 14 กันยายน 2565)

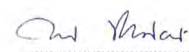
(ต่อ)

สกุล/กลุ่มแฟลงก์ตอนสัตว์	ปริมาณแฟลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)					
	22102536-1	22102536-2	22102536-3	22102536-4	22102536-5	22102536-6
Phylum Annelida						
Class Polychaeta						
6. Polychaete larvae	10,000	-	-	-	-	-
Phylum Arthropoda						
Class Crustacea						
Subclass Copepoda						
7. Copepod nauplii	10,000	26,000	91,000	166,000	84,000	43,000
Order Calanoida						
8. Calanoid copepod	-	-	5,000	6,000	-	-
Order Cyclopoida						
9. Cyclopoid copepod	10,000	-	5,000	-	-	-
Phylum Mollusca						
Class Bivalvia						
10. Pelecypod larvae	-	-	11,000	-	-	-
Phylum Chordata						
Subphylum Urochordata						
Class Larvacea						
Family Oikopleuridae						
11. <i>Oikopleura</i> sp.	49,000	-	16,000	6,000	17,000	9,000
ชนิดแฟลงก์ตอนสัตว์	6	3	6	7	3	3
ปริมาณแฟลงก์ตอนสัตว์	118,000	53,000	138,000	208,000	226,000	129,000
ดัชนีความหลากหลายแฟลงก์ตอนสัตว์	1.5465	1.0172	1.1566	0.8560	0.8900	0.8600
ดัชนีความสม่ำเสมอแฟลงก์ตอนสัตว์	0.8631	0.9259	0.6455	0.4399	0.8101	0.7828

Sample Location :

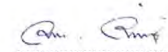
1. สถานี 22102536-1 : สถานี A อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
2. สถานี 22102536-2 : สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
3. สถานี 22102536-3 : สถานี C อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
4. สถานี 22102536-4 : สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
5. สถานี 22102536-5 : สถานี I บริเวณใกล้จุดสูบเพื่อนำไปหล่อเย็น
6. สถานี 22102536-6 : สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment- preservation standards (APHA, USEPA)



(นางสาวกนกวรรณ ขวาค่อน)

ผู้วิเคราะห์



(นายอลงกต อินทรชาติ)

หัวหน้าสถานีวิจัยประมงศรีราชา



Tintinnopsis sp.



Polychaete larvae



Copepod nauplii



Pelecypod larvae



Oikopleura sp.



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : GHECO-ONE COMPANY LIMITED.

Address : 11, 1-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Location : GHECO-ONE

รายงานผลการวิเคราะห์สัตว์หน้าดิน

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 14 กันยายน 2565)

สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)					
	22102532-1	22102532-2	22102532-3	22102532-4	22102532-5	22102532-6
Phylum Annelida						
Class Polychaeta						
Order Capitellida						
Family Capitellidae						
<i>Heteromastus</i> sp. (ไส้เดือนทะเล)	-	-	-	45	15	-
Family Maldanidae						
<i>Euchymene</i> sp. (ไส้เดือนทะเล)	-	-	-	15	-	-
Order Cirratulida						
Family Paraonidae						
<i>Paraonis</i> sp. (ไส้เดือนทะเล)	45	15	15	-	-	-
Order Eunicida						
Family Eunicidae						
<i>Marphysa</i> sp. (ไส้เดือนทะเล)	15	-	237	-	-	-
Family Onuphidae						
<i>Diopatra</i> sp. (ไส้เดือนทะเล)	-	15	-	-	-	-

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 14 กันยายน 2565)
(ต่อ)

สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)					
	22102532-1	22102532-2	22102532-3	22102532-4	22102532-5	22102532-6
Order Opheliida						
Family Opheliidae						
<i>Armandia</i> sp. (ไส้เดือนทะเล)	15	-	-	-	15	
<i>Ophelina</i> sp. (ไส้เดือนทะเล)	-	15	-	-	-	-
Order Orbiniida						
Family Orhiniidae						
<i>Scoloplos</i> sp. (ไส้เดือนทะเล)	119	-	45	-	-	-
Order Phyllodocida						
Family Glyceridae						
<i>Glycera</i> sp. (ไส้เดือนทะเล)	-	-	15	-	-	-
Family Nephtyidae						
<i>Nephtys</i> sp. (ไส้เดือนทะเล)	15	-	-	15	-	-
Family Nereididae						
<i>Nereis</i> sp. (แม่เพรียง)	-	-	30	-	-	-
Order Spionida						
Family Magelonidae						
<i>Magelona</i> sp. (ไส้เดือนทะเล)	-	-	15	-	-	15
Phylum Arthropoda						
Class Malacostraca						
Order Decapoda						
Family Diogenidae						
<i>Diogenes</i> sp. (ปูเสฉวน)	-	-	15	-	-	-
Family Panacidae						
<i>Penaeus</i> sp. (กุ้งชนิดหนึ่ง)	15	-	-	-	-	-

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 14 กันยายน 2565)
(ต่อ)

สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)					
	22102532-1	22102532-2	22102532-3	22102532-4	22102532-5	22102532-6
Phylum Mollusca						
Class Bivalvia						
Order Venerida						
Family Mactridae						
<i>Mactra</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	60	-	-	-	-
Family Tellinidae						
<i>Tellina</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	30	45	-	-	-
Family Veneridae						
<i>Timoclea</i> sp. (หอยสองฝาชนิดหนึ่ง)	-	-	45	-	15	-
Phylum Echinodermata						
Class Echinoidea						
Order Camarodonta						
Family Temnopleuridae						
<i>Temnopleurus</i> sp. (เม่นทะเล)	-	30	-	-	-	-
Phylum Chordata						
Class Leptocardii						
Order Amphioxiformes						
Family Branchiostomatidae						
<i>Branchiostoma</i> sp. (แอมฟิออกซ์ส)	-	-	15	-	-	-
ชนิดสัตว์หน้าดิน	6	6	10	3	3	1
ปริมาณสัตว์หน้าดิน	224	165	477	75	45	15
ค่าดัชนีความหลากหลายสัตว์หน้าดิน	1.3826	1.6417	1.7336	0.9503	1.0986	0.0000

Sample Location : 1. สถานี 22102532-1 : สถานี A อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
2. สถานี 22102532-2 : สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
3. สถานี 22102532-3 : สถานี C อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
4. สถานี 22102532-4 : สถานี D อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร
5. สถานี 22102532-5 : สถานี I บริเวณใกล้จุดสูบเพื่อนำไปหล่อเย็น
6. สถานี 22102532-6 : สถานี O อยู่ห่างจากจุดระบายน้ำทั้ง 500 เมตร

Condition of Sample : contained in one plastic zip bag

อรุณ นิละวาล

(นายอรรณพ นิละวาล)
ผู้วิเคราะห์

ณ. อินทรา

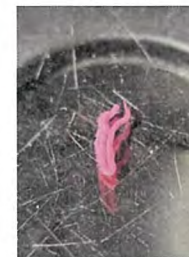
(นายอลงกต อินทรา)
หัวหน้าสถานีวิจัยประมงศรีราชา



Diogenes sp.



Diopatra sp.



Glycera sp.



Armandia sp.



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : GHECO-ONE COMPANY LIMITED.

Address : 11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

Project Location : GHECO-ONE

รายงานผลการวิเคราะห์สัตว์น้ำวัยอ่อน

ตาราง ผลการวิเคราะห์สัตว์น้ำวัยอ่อน (เก็บตัวอย่างวันที่ 14 กันยายน 2565)

กลุ่มของสัตว์น้ำวัยอ่อน	ปริมาณสัตว์น้ำวัยอ่อน (หน่วยต่อลูกบาศก์เมตร)	
	22102578-1	22102578-2
Phylum Arthropoda		
Class Crustacea		
Subclass Copepoda		
Copepod nauplii (ตัวอ่อนโคพีพอดระยะนาอเพลียส)	26,000	84,000
จำนวนกลุ่มของสัตว์น้ำวัยอ่อนทั้งหมด	1	1
ปริมาณของสัตว์น้ำวัยอ่อนทั้งหมด	26,000	84,000

Sample Location : 1. สถานี 22102578-1 : สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร
2. สถานี 22102578-2 : สถานี I บริเวณใกล้จุดสูบน้ำไปหล่อเย็น

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment- preservation standards (APHA, USEPA)

(นางสาวกนกวรรณ ขวาค่อน)
ผู้วิเคราะห์

(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

รายงานผลการวิเคราะห์สัตว์น้ำวัยอ่อน (Aquatic larvae)

1. สถานี 22102578-1 : สถานี B อยู่ห่างจากจุดระบายน้ำทั้ง 1,000 เมตร

ทำการเก็บตัวอย่างสัตว์น้ำวัยอ่อนเมื่อวันที่ 14 กันยายน 2565 จากการศึกษาวិเคราะห์ตัวอย่างพบสัตว์น้ำวัยอ่อนใน Phylum Arthropoda จำนวน 1 กลุ่ม มีปริมาณรวมทั้งหมด 26,000 หน่วยต่อลูกบาศก์เมตร รายละเอียดกลุ่มและปริมาณสัตว์น้ำวัยอ่อนที่วิเคราะห์ ดังแสดงไว้ในตาราง

2. สถานี 22102578-2 : สถานี I บริเวณใกล้จุดสูบน้ำไปหล่อเย็น

ทำการเก็บตัวอย่างสัตว์น้ำวัยอ่อนเมื่อวันที่ 14 กันยายน 2565 จากการศึกษาวิเคราะห์ตัวอย่างพบสัตว์น้ำวัยอ่อนใน Phylum Arthropoda จำนวน 1 กลุ่ม มีปริมาณรวมทั้งหมด 84,000 หน่วยต่อลูกบาศก์เมตร รายละเอียดกลุ่มและปริมาณสัตว์น้ำวัยอ่อนที่วิเคราะห์ ดังแสดงไว้ในตาราง



Copepod nauplii

ภาคผนวก ค-10

อาชีพอนามัยและความปลอดภัย

ความร้อน



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293866

Date Received : Aug 19, 2022

Date Reported : Aug 23, 2022

Report Number: 2390536-1

Page 1 of 2

Sample Number 2293866-1
Parameter Heat Stress (Sampling Time : 11.00 AM - 01.00 PM)
Measurement Date Aug 16, 2022
Measurement by Tarin Octjinda
Location ปฏบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แทน : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Steam Turbine	120	30.1	27.2	36.9	36.7
Average (WBGT)		30.1			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293866

Date Received : Aug 19, 2022

Date Reported : Aug 23, 2022

Report Number: 2390536-1

Page 2 of 2

Sample Number 2293866-2
Parameter Heat Stress (Sampling Time : 11.00 AM - 01.00 PM)
Measurement Date Aug 16, 2022
Measurement by Tarin Octjinda
Location ปฏบัติงาน 1 พื้นที่ (ชื่อ-นามสกุล ผู้ปฏิบัติงาน : - แทน : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
อาคารพ่นไอน้ำ	120	27.1	25.5	30.9	30.7
Average (WBGT)		27.1			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

Supot S.
Supot Salamteh
Section Head

Approved by

Wichan Ch.
Wichan Choonharat
Assistant Manager

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132723

Date Received : Nov 15, 2022

Date Reported : Nov 17, 2022

Report Number: 2478237-1

Page 1 of 2

Sample Number 22132723-1
 Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
 Measurement Date Nov 14, 2022
 Measurement by Natthapon Jiengwareewong
 Location ปรุ้งนังงาน 1 ชั้นที่ (ชื่อ-นามสกุล ปรุ้งนังงาน : - แทน : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
อาคารหอไอศกรีม	120	27.9	26.2	31.8	31.4
Average (WBGT)		27.9			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

Supot S.
 Supot Salameh
 Section Head

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S VReportSL_Air Heat.rpt (6 02PM)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132723

Date Received : Nov 15, 2022

Date Reported : Nov 17, 2022

Report Number: 2478237-1

Page 2 of 2

Sample Number 22132723-2
 Parameter Heat Stress (Sampling Time : 10.00 AM - 12.00 PM)
 Measurement Date Nov 14, 2022
 Measurement by Natthapon Jiengwareewong
 Location ปรุ้งนังงาน 1 ชั้นที่ (ชื่อ-นามสกุล ปรุ้งนังงาน : - แทน : -)

Location	Duration (min)	WBGT (°C)	NWB (°C)	GT (°C)	DB (°C)
Steam Turbine	120	32.7	30.0	39.0	38.9
Average (WBGT)		32.7			
Guideline WBGT (°C)		34.0			

Reference Method : Wet Bulb Globe Temperature

Guideline:

1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Ministerial Regulation on Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E.2559

Technical Management

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S VReportSL_Air Heat.rpt (6 02PM)

แสงสว่าง



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22106204

Date Received : Aug 22, 2022

Date Reported : Aug 27, 2022

Report Number : 2417391-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - อาคารหลัก : Control Room									
1	22106204-1	16 Aug 2022	Day time	1	521	-	400-500	-	Pass
1	22106204-2	16 Aug 2022	Night time	1	S08	-	400-500	-	Pass

Measurement by : Supot Salamteh Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2294179

Date Received : Aug 22, 2022

Date Reported : Aug 27, 2022

Report Number : 2417393-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - อาคารหลัก : 1st Floor : Steam Turbine									
1	2294179-1	16 Aug 2022	Day time	1	628	-	200-300	-	Pass
1	2294179-2	16 Aug 2022	Night time	1	544	-	200-300	-	Pass

Measurement by : Supot Salamteh Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot S

Supot Salamteh
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Supot Salamteh
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Wichan Choonharat
Assistant Manager

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Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22106201

Date Received : Aug 22, 2022

Date Reported : Aug 27, 2022

Report Number : 2417388-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - อาคารผลิต : 2nd Floor : Steam Turbine									
1	22106201-1	16 Aug 2022	Day time	1	331	-	200-300	-	Pass
1	22106201-2	16 Aug 2022	Night time	1	202	-	200-300	-	Pass

Measurement by : Supot Salamteh Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22106202

Date Received : Aug 22, 2022

Date Reported : Aug 27, 2022

Report Number : 2417389-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comments
					Spot	Average	Spot/Min	Average	
Spot - อาคารผลิต : 3rd Floor : Steam Turbine									
1	22106202-1	16 Aug 2022	Day time	1	305	-	200-300	-	Pass
1	22106202-2	16 Aug 2022	Night time	1	207	-	200-300	-	Pass

Measurement by : Supot Salamteh Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot S.

Supot Salamteh
Section Head

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Supot S.

Supot Salamteh
Section Head

Approved by

Wichan Choonharat

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Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22106203
Date Received : Aug 22, 2022
Date Reported : Aug 27, 2022
Report Number : 2417390-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - รายการวัด : 3rd Floor : Boiler Cool Feed									
1	22106203-1	16 Aug 2022	Day time	1	805	-	200-300	-	Pass
1	22106203-2	16 Aug 2022	Night time	1	335	-	200-300	-	Pass

Measurement by : Supot Salamteh Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22106205
Date Received : Aug 22, 2022
Date Reported : Aug 27, 2022
Report Number : 2417392-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - รายการวัด : 1st Floor : Front of Tool Room									
1	22106205-1	16 Aug 2022	Day time	1	945	-	200-300	-	Pass
1	22106205-2	16 Aug 2022	Night time	1	977	-	200-300	-	Pass
Spot - รายการวัด : 1st Floor : Desk in Maintenance Room No.2									
2	22106205-3	16 Aug 2022	Day time	1	979	-	200-300	-	Pass
2	22106205-4	16 Aug 2022	Night time	1	780	-	200-300	-	Pass
Spot - รายการวัด : 1st Floor : Desk in Maintenance Room No.1									
3	22106205-5	16 Aug 2022	Day time	1	1,265	-	200-300	-	Pass
3	22106205-6	16 Aug 2022	Day time	2	1,216	-	300		
3	22106205-7	16 Aug 2022	Day time	3	1,153	-	200		
3	22106205-8	16 Aug 2022	Night time	1	595	-	200-300	-	Pass
Spot - รายการวัด : 1st Floor : Test Motor									
4	22106205-9	16 Aug 2022	Day time	1	799	-	200-300	-	Pass
4	22106205-10	16 Aug 2022	Night time	1	590	-	200-300	-	Pass
Spot - รายการวัด : 1st Floor : Maintenance Room									
5	22106205-11	16 Aug 2022	Day time	1	922	-	200-300	-	Pass
5	22106205-12	16 Aug 2022	Night time	1	779	-	200-300	-	Pass

Measurement by : Supot Salamteh Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot S.
Supot Salamteh
Section Head

Approved by

Wichan Choonharat
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Assistant Manager

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Supot S.
Supot Salamteh
Section Head

Approved by

Wichan Choonharat
Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22133667

Date Received : Nov 17, 2022
Date Reported : Nov 18, 2022
Report Number : 2495613-1

Page 1 of 1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - รายการจุดวัด : 1st Floor : Front of Tool Room									
1	22133667-1	14 Nov 2022	Day time	1	623	-	200-300	-	Pass
1	22133667-2	14 Nov 2022	Night time	1	593	-	200-300	-	Pass
Spot - รายการจุดวัด : 1st Floor : Desk in Maintenance Room No.2									
2	22133667-3	14 Nov 2022	Day time	1	1,185	-	200-300	-	Pass
2	22133667-4	14 Nov 2022	Day time	2	1,135	-	300		
2	22133667-5	14 Nov 2022	Day time	3	1,190	-	200		
2	22133667-6	14 Nov 2022	Night time	1	797	-	200-300	-	Pass
Spot - รายการจุดวัด : 1st Floor : Desk in Maintenance Room No.1									
3	22133667-7	14 Nov 2022	Day time	1	1,430	-	200-300	-	Pass
3	22133667-8	14 Nov 2022	Day time	2	1,650	-	300		
3	22133667-9	14 Nov 2022	Day time	3	1,661	-	200		
3	22133667-10	14 Nov 2022	Night time	1	826	-	200-300	-	Pass
Spot - รายการจุดวัด : 1st Floor : Test Motor									
4	22133667-11	14 Nov 2022	Day time	1	845	-	200-300	-	Pass
4	22133667-12	14 Nov 2022	Night time	1	645	-	200-300	-	Pass
Spot - รายการจุดวัด : 1st Floor : Maintenance Room									
5	22133667-13	14 Nov 2022	Day time	1	809	-	200-300	-	Pass
5	22133667-14	14 Nov 2022	Night time	1	716	-	200-300	-	Pass

Measurement by : Natthapon Jiengwareewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22133668

Date Received : Nov 17, 2022
Date Reported : Nov 18, 2022
Report Number : 2482928-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - รายการจุดวัด : Control Room									
1	22133668-1	14 Nov 2022	Day time	1	680	-	400-500	-	Pass
1	22133668-2	14 Nov 2022	Night time	1	620	-	400-500	-	Pass

Measurement by : Natthapon Jiengwareewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22133669
Date Received : Nov 17, 2022
Date Reported : Nov 18, 2022
Report Number : 2482929-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - อาคารหลัก : 3rd Floor : Boiler Cool Feed									
1	22133669-1	14 Nov 2022	Day time	1	587	-	200-300	-	Pass
1	22133669-2	14 Nov 2022	Night time	1	271	-	200-300	-	Pass

Measurement by : Natthapon Jiengwareewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22133671
Date Received : Nov 17, 2022
Date Reported : Nov 18, 2022
Report Number : 2482930-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - อาคารหลัก : 3rd Floor : Steam Turbine									
1	22133671-1	14 Nov 2022	Day time	1	273	-	200-300	-	Pass
1	22133671-2	14 Nov 2022	Night time	1	226	-	200-300	-	Pass

Measurement by : Natthapon Jiengwareewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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Project Name :
Project Location : GHECO-ONE

Lot ID: 22133672

Date Received : Nov 17, 2022
Date Reported : Nov 18, 2022
Report Number : 2482931-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - อาคารผลิต : 2nd Floor : Steam Turbine									
1	22133672-1	14 Nov 2022	Day time	1	235	-	200-300	-	Pass
1	22133672-2	14 Nov 2022	Night time	1	221	-	200-300	-	Pass

Measurement by : Natthapon Jiengwareewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017), dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)



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Client : GHECO-ONE COMPANY LIMITED
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P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22133673

Date Received : Nov 17, 2022
Date Reported : Nov 18, 2022
Report Number : 2482934-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comments
					Spot	Average	Spot/Min	Average	
Spot - อาคารผลิต : 1st Floor : Steam Turbine									
1	22133673-1	14 Nov 2022	Day time	1	544	-	200-300	-	Pass
1	22133673-2	14 Nov 2022	Night time	1	429	-	200-300	-	Pass

Measurement by : Natthapon Jiengwareewong Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

Guideline : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017), dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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Supot Salamteh
Section Head

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Wichan Choonharat
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415938-1

Page 1 of 1

Sample Number 2293817-1
Parameter Noise (Leq 8 hrs.)
Location Pump Station
Measurement Date Aug 15, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	73.9	82.1	73.3
11:00 AM - 12:00 PM	74.1	81.4	73.5
12:00 PM - 01:00 PM	74.0	81.9	73.5
01:00 PM - 02:00 PM	70.7	80.7	69.6
02:00 PM - 03:00 PM	70.8	80.2	69.9
03:00 PM - 04:00 PM	70.9	80.4	70.0
04:00 PM - 05:00 PM	70.9	80.8	70.1
05:00 PM - 06:00 PM	70.9	80.8	70.0

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

Standard (dB(A))

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415939-1

Page 1 of 1

Sample Number 2293817-2
Parameter Noise (Leq 8 hrs.)
Location Pump Station
Measurement Date Aug 16, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	70.2	80.0	69.2
11:00 AM - 12:00 PM	70.2	80.2	69.3
12:00 PM - 01:00 PM	70.4	80.0	69.5
01:00 PM - 02:00 PM	70.6	80.1	69.6
02:00 PM - 03:00 PM	70.4	80.2	69.4
03:00 PM - 04:00 PM	70.3	80.5	69.3
04:00 PM - 05:00 PM	70.1	80.9	69.3
05:00 PM - 06:00 PM	70.7	81.6	69.9

Leq Average 8 hrs. (dB(A))

Lmax (dB(A))

Standard (dB(A))

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamtheth
Section Head

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Technical Management

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Thanita Kulsuriwong
Scientist (4)

Approved by

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Supot Salamtheth
Section Head

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415940-1

Page 1 of 1

Sample Number 2293817-3
Parameter Noise (Leq 8 hrs.)
Location Pump Station
Measurement Date Aug 17, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	74.5	81.1	74.0
11:00 AM - 12:00 PM	74.5	82.2	74.0
12:00 PM - 01:00 PM	72.6	81.4	69.4
01:00 PM - 02:00 PM	70.4	80.3	69.4
02:00 PM - 03:00 PM	70.3	80.3	69.3
03:00 PM - 04:00 PM	70.4	80.1	69.4
04:00 PM - 05:00 PM	70.3	81.5	69.3
05:00 PM - 06:00 PM	70.3	80.1	69.4

Leq Average 8 hrs. (dB(A))

72.1

Lmax (dB(A))

82.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415941-1

Page 1 of 1

Sample Number 2293817-4
Parameter Noise (Leq 8 hrs.)
Location Pump Station
Measurement Date Aug 18, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	69.9	80.4	69.0
11:00 AM - 12:00 PM	69.9	80.2	69.1
12:00 PM - 01:00 PM	69.7	80.5	69.0
01:00 PM - 02:00 PM	73.9	103.3	68.9
02:00 PM - 03:00 PM	69.9	80.6	69.0
03:00 PM - 04:00 PM	70.0	81.2	69.0
04:00 PM - 05:00 PM	70.0	80.4	69.0
05:00 PM - 06:00 PM	69.9	80.1	69.2

Leq Average 8 hrs. (dB(A))

70.7

Lmax (dB(A))

103.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

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Supot Salamteh
Section Head

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Thanita Kulsuriwong
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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293817
Date Received : Aug 22, 2022
Date Reported : Aug 26, 2022
Report Number: 2415942-1

Page 1 of 1

Sample Number	2293817-5
Parameter	Noise (Leq 8 hrs.)
Location	Pump Station
Measurement Date	Aug 19, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	69.9	89.1	68.6
11:00 AM - 12:00 PM	69.6	81.0	68.7
12:00 PM - 01:00 PM	69.7	80.8	68.7
01:00 PM - 02:00 PM	69.7	80.3	68.6
02:00 PM - 03:00 PM	69.6	80.6	68.5
03:00 PM - 04:00 PM	69.9	80.7	68.9
04:00 PM - 05:00 PM	70.0	80.7	69.0
05:00 PM - 06:00 PM	70.0	80.3	69.0
Leq Average 8 hrs. (dB(A))	69.8		
Lmax (dB(A))		89.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือวัดเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293817
Date Received : Aug 22, 2022
Date Reported : Aug 26, 2022
Report Number: 2415943-1

Page 1 of 1

Sample Number	2293817-6
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	Aug 15, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	81.5	86.4	80.5
11:00 AM - 12:00 PM	81.4	86.1	80.3
12:00 PM - 01:00 PM	82.1	86.6	81.0
01:00 PM - 02:00 PM	82.4	87.1	81.3
02:00 PM - 03:00 PM	82.7	86.9	81.7
03:00 PM - 04:00 PM	82.6	87.0	81.4
04:00 PM - 05:00 PM	82.7	87.4	81.5
05:00 PM - 06:00 PM	82.0	86.9	81.1
Leq Average 8 hrs. (dB(A))	82.2		
Lmax (dB(A))		87.4	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือวัดเสียง ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293817
Date Received : Aug 22, 2022
Date Reported : Aug 26, 2022
Report Number: 2415944-1

Page 1 of 1

Sample Number 2293817-7
Parameter Noise (Leq 8 hrs.)
Location Boiler
Measurement Date Aug 16, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	82.7	87.4	81.5
11:00 AM - 12:00 PM	82.7	87.9	81.6
12:00 PM - 01:00 PM	83.0	87.1	81.9
01:00 PM - 02:00 PM	83.1	87.2	81.9
02:00 PM - 03:00 PM	83.0	87.2	81.9
03:00 PM - 04:00 PM	83.0	87.4	81.9
04:00 PM - 05:00 PM	82.9	87.7	81.9
05:00 PM - 06:00 PM	82.5	86.9	81.7

Leq Average 8 hrs. (dB(A))

82.9

Lmax (dB(A))

87.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293817
Date Received : Aug 22, 2022
Date Reported : Aug 26, 2022
Report Number: 2415945-1

Page 1 of 1

Sample Number 2293817-8
Parameter Noise (Leq 8 hrs.)
Location Boiler
Measurement Date Aug 17, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	82.4	87.0	81.2
11:00 AM - 12:00 PM	82.6	87.1	81.5
12:00 PM - 01:00 PM	83.3	87.0	82.1
01:00 PM - 02:00 PM	83.0	87.2	82.0
02:00 PM - 03:00 PM	83.4	87.7	82.5
03:00 PM - 04:00 PM	83.2	87.1	82.3
04:00 PM - 05:00 PM	83.2	87.7	82.1
05:00 PM - 06:00 PM	83.3	87.3	82.2

Leq Average 8 hrs. (dB(A))

83.1

Lmax (dB(A))

87.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293817
Date Received : Aug 22, 2022
Date Reported : Aug 26, 2022
Report Number: 2415946-1

Page 1 of 1

Sample Number	2293817-9
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	Aug 18, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	82.1	86.1	81.0
11:00 AM - 12:00 PM	82.3	87.1	81.1
12:00 PM - 01:00 PM	81.9	90.6	80.9
01:00 PM - 02:00 PM	82.2	86.9	81.2
02:00 PM - 03:00 PM	82.1	87.0	81.1
03:00 PM - 04:00 PM	81.9	87.4	81.0
04:00 PM - 05:00 PM	82.2	86.7	81.2
05:00 PM - 06:00 PM	82.3	87.6	81.3
Leq Average 8 hrs. (dB(A))	82.1		
Lmax (dB(A))		90.6	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293817
Date Received : Aug 22, 2022
Date Reported : Aug 26, 2022
Report Number: 2415947-1

Page 1 of 1

Sample Number	2293817-10
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	Aug 19, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	82.3	86.6	81.2
11:00 AM - 12:00 PM	82.0	87.1	81.0
12:00 PM - 01:00 PM	83.0	87.5	82.2
01:00 PM - 02:00 PM	82.4	86.6	81.6
02:00 PM - 03:00 PM	82.0	86.6	81.2
03:00 PM - 04:00 PM	81.8	86.4	81.0
04:00 PM - 05:00 PM	82.1	86.5	81.2
05:00 PM - 06:00 PM	82.2	86.5	81.2
Leq Average 8 hrs. (dB(A))	82.2		
Lmax (dB(A))		87.5	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย ในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
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Approved by

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Supot Salamteh
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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415948-1

Page 1 of 1

Sample Number	2293817-11
Parameter	Noise (Leq 8 hrs.)
Location	Turbine
Measurement Date	Aug 15, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.3	87.0	86.1
11:00 AM - 12:00 PM	86.3	86.8	86.1
12:00 PM - 01:00 PM	86.3	87.0	86.1
01:00 PM - 02:00 PM	86.3	86.9	86.1
02:00 PM - 03:00 PM	86.3	86.9	86.1
03:00 PM - 04:00 PM	86.3	87.1	86.1
04:00 PM - 05:00 PM	86.3	86.9	86.1
05:00 PM - 06:00 PM	86.3	86.9	86.2

Leq Average 8 hrs. (dB(A))

86.3

Lmax (dB(A))

87.1

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Analysis / Test Report

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415949-1

Page 1 of 1

Sample Number	2293817-12
Parameter	Noise (Leq 8 hrs.)
Location	Turbine
Measurement Date	Aug 16, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.4	87.1	86.3
11:00 AM - 12:00 PM	86.4	86.9	86.3
12:00 PM - 01:00 PM	86.5	87.1	86.4
01:00 PM - 02:00 PM	86.4	87.1	86.2
02:00 PM - 03:00 PM	86.4	87.7	86.3
03:00 PM - 04:00 PM	86.4	87.1	86.3
04:00 PM - 05:00 PM	86.4	87.1	86.2
05:00 PM - 06:00 PM	86.5	87.1	86.3

Leq Average 8 hrs. (dB(A))

86.4

Lmax (dB(A))

87.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Supot S.

Supot Salamteh
Section Head

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415950-1

Page 1 of 1

Sample Number 2293817-13
Parameter Noise (Leq 8 hrs.)
Location Turbine
Measurement Date Aug 17, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.6	87.4	86.4
11:00 AM - 12:00 PM	86.5	87.2	86.3
12:00 PM - 01:00 PM	86.5	87.2	86.3
01:00 PM - 02:00 PM	86.5	87.3	86.3
02:00 PM - 03:00 PM	86.5	87.3	86.2
03:00 PM - 04:00 PM	86.4	87.0	86.3
04:00 PM - 05:00 PM	86.4	87.1	86.2
05:00 PM - 06:00 PM	86.5	87.3	86.3

Leq Average 8 hrs. (dB(A))

86.5

Lmax (dB(A))

87.4

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Analysis / Test Report

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415951-1

Page 1 of 1

Sample Number 2293817-14
Parameter Noise (Leq 8 hrs.)
Location Turbine
Measurement Date Aug 18, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.6	87.4	86.3
11:00 AM - 12:00 PM	86.5	87.4	86.2
12:00 PM - 01:00 PM	86.6	91.7	86.4
01:00 PM - 02:00 PM	86.6	87.2	86.4
02:00 PM - 03:00 PM	86.5	87.2	86.3
03:00 PM - 04:00 PM	86.5	87.2	86.3
04:00 PM - 05:00 PM	86.4	87.3	86.2
05:00 PM - 06:00 PM	86.4	87.1	86.2

Leq Average 8 hrs. (dB(A))

86.5

Lmax (dB(A))

91.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415952-1

Page 1 of 1

Sample Number	2293817-15
Parameter	Noise (Leq 8 hrs.)
Location	Turbine
Measurement Date	Aug 19, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.3	87.1	86.1
11:00 AM - 12:00 PM	86.4	87.1	86.2
12:00 PM - 01:00 PM	86.2	86.9	85.9
01:00 PM - 02:00 PM	86.2	87.1	85.9
02:00 PM - 03:00 PM	86.3	87.1	86.1
03:00 PM - 04:00 PM	86.5	87.2	86.3
04:00 PM - 05:00 PM	86.5	87.2	86.3
05:00 PM - 06:00 PM	86.4	87.0	86.2

Leq Average 8 hrs. (dB(A))

86.4

Lmax (dB(A))

87.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415953-1

Page 1 of 1

Sample Number	2293817-16
Parameter	Noise (Leq 8 hrs.)
Location	อาคารคนงาน
Measurement Date	Aug 15, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	87.3	89.7	86.9
11:00 AM - 12:00 PM	87.2	90.5	86.9
12:00 PM - 01:00 PM	87.7	90.1	87.1
01:00 PM - 02:00 PM	88.0	90.4	87.4
02:00 PM - 03:00 PM	88.1	91.0	87.4
03:00 PM - 04:00 PM	88.1	90.5	87.4
04:00 PM - 05:00 PM	88.0	90.1	87.3
05:00 PM - 06:00 PM	87.8	90.1	87.3

Leq Average 8 hrs. (dB(A))

87.8

Lmax (dB(A))

91.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Approved by

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Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415954-1

Page 1 of 1

Sample Number : 2293817-17
Parameter : Noise (Leq 8 hrs.)
Location : อาคารนวดสปา
Measurement Date : Aug 16, 2022
Measurement by : Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	87.9	89.9	87.5
11:00 AM - 12:00 PM	88.0	90.5	87.5
12:00 PM - 01:00 PM	87.8	89.9	87.4
01:00 PM - 02:00 PM	87.7	89.3	87.3
02:00 PM - 03:00 PM	87.9	89.9	87.5
03:00 PM - 04:00 PM	87.8	90.5	87.4
04:00 PM - 05:00 PM	87.8	89.9	87.5
05:00 PM - 06:00 PM	87.8	89.7	87.4

Leq Average 8 hrs. (dB(A))

87.8

Lmax (dB(A))

90.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415955-1

Page 1 of 1

Sample Number : 2293817-18
Parameter : Noise (Leq 8 hrs.)
Location : อาคารนวดสปา
Measurement Date : Aug 17, 2022
Measurement by : Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.3	90.5	89.0
11:00 AM - 12:00 PM	89.2	90.6	89.0
12:00 PM - 01:00 PM	89.2	90.4	89.0
01:00 PM - 02:00 PM	89.2	90.5	88.9
02:00 PM - 03:00 PM	89.3	91.5	89.0
03:00 PM - 04:00 PM	89.2	90.4	89.0
04:00 PM - 05:00 PM	89.2	90.8	88.9
05:00 PM - 06:00 PM	89.3	90.9	89.0

Leq Average 8 hrs. (dB(A))

89.2

Lmax (dB(A))

91.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita K.

Thanita Kulsuriwong
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Supot Salamteh
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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415956-1

Page 1 of 1

Sample Number	2293817-19
Parameter	Noise (Leq 8 hrs.)
Location	อาคารนคณภัณ
Measurement Date	Aug 18, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.3	90.8	89.0
11:00 AM - 12:00 PM	89.3	91.5	89.0
12:00 PM - 01:00 PM	89.3	90.7	89.0
01:00 PM - 02:00 PM	89.3	91.0	89.0
02:00 PM - 03:00 PM	89.3	91.1	89.0
03:00 PM - 04:00 PM	89.3	90.6	89.0
04:00 PM - 05:00 PM	89.3	90.9	89.0
05:00 PM - 06:00 PM	89.4	91.2	89.0

Leq Average 8 hrs. (dB(A))

89.3

Lmax (dB(A))

91.5

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293817

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2415957-1

Page 1 of 1

Sample Number	2293817-20
Parameter	Noise (Leq 8 hrs.)
Location	อาคารนคณภัณ
Measurement Date	Aug 19, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.3	90.5	89.0
11:00 AM - 12:00 PM	89.2	90.7	88.9
12:00 PM - 01:00 PM	89.3	90.4	89.0
01:00 PM - 02:00 PM	88.9	90.5	88.3
02:00 PM - 03:00 PM	88.5	89.7	88.2
03:00 PM - 04:00 PM	88.5	89.9	88.2
04:00 PM - 05:00 PM	88.5	90.0	88.2
05:00 PM - 06:00 PM	88.6	90.0	88.3

Leq Average 8 hrs. (dB(A))

88.9

Lmax (dB(A))

90.7

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496086-1

Page 1 of 1

Sample Number 22132690-1
Parameter Noise (Leq 8 hrs.)
Location Pump Station
Measurement Date Nov 08, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	73.7	81.6	73.1
10:00 AM - 11:00 AM	73.4	82.2	73.0
11:00 AM - 12:00 PM	73.2	82.2	72.9
12:00 PM - 01:00 PM	73.6	81.6	73.0
01:00 PM - 02:00 PM	73.8	82.1	73.3
02:00 PM - 03:00 PM	73.7	81.7	73.3
03:00 PM - 04:00 PM	73.7	82.0	73.3
04:00 PM - 05:00 PM	73.7	81.2	73.4

Leq Average 8 hrs. (dB(A))

73.6

Lmax (dB(A))

82.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496087-1

Page 1 of 1

Sample Number 22132690-2
Parameter Noise (Leq 8 hrs.)
Location Pump Station
Measurement Date Nov 09, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	71.7	84.4	69.9
10:00 AM - 11:00 AM	73.7	83.9	73.3
11:00 AM - 12:00 PM	73.6	82.8	73.2
12:00 PM - 01:00 PM	73.6	80.9	73.3
01:00 PM - 02:00 PM	73.4	81.2	73.0
02:00 PM - 03:00 PM	73.2	80.7	72.9
03:00 PM - 04:00 PM	73.1	82.3	69.3
04:00 PM - 05:00 PM	70.3	83.7	69.1

Leq Average 8 hrs. (dB(A))

73.0

Lmax (dB(A))

84.4

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496088-1

Page 1 of 1

Sample Number 22132690-3
Parameter Noise (Leq 8 hrs.)
Location Pump Station
Measurement Date Nov 10, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	71.2	81.5	70.3
10:00 AM - 11:00 AM	70.7	83.4	70.1
11:00 AM - 12:00 PM	70.6	81.6	70.0
12:00 PM - 01:00 PM	70.9	82.6	70.0
01:00 PM - 02:00 PM	70.4	81.1	69.8
02:00 PM - 03:00 PM	70.3	80.4	69.7
03:00 PM - 04:00 PM	70.9	81.1	69.9
04:00 PM - 05:00 PM	70.8	81.2	70.2

Leq Average 8 hrs. (dB(A))

70.7

Lmax (dB(A))

83.4

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496089-1

Page 1 of 1

Sample Number 22132690-4
Parameter Noise (Leq 8 hrs.)
Location Pump Station
Measurement Date Nov 11, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	72.4	96.8	69.8
10:00 AM - 11:00 AM	71.3	86.4	69.4
11:00 AM - 12:00 PM	70.6	82.7	69.3
12:00 PM - 01:00 PM	73.3	80.8	72.8
01:00 PM - 02:00 PM	74.6	81.6	72.9
02:00 PM - 03:00 PM	73.2	80.8	72.8
03:00 PM - 04:00 PM	73.5	80.4	72.9
04:00 PM - 05:00 PM	73.4	80.4	72.9

Leq Average 8 hrs. (dB(A))

72.9

Lmax (dB(A))

96.8

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita Kulsuriwong
Scientist (4)

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Supot Salamteh
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Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496090-1

Page 1 of 1

Sample Number 22132690-5
Parameter Noise (Leq 8 hrs.)
Location Pump Station
Measurement Date Nov 12, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	70.7	84.4	70.1
10:00 AM - 11:00 AM	70.9	85.0	69.9
11:00 AM - 12:00 PM	70.6	84.7	70.0
12:00 PM - 01:00 PM	70.5	85.0	69.8
01:00 PM - 02:00 PM	70.6	83.6	69.8
02:00 PM - 03:00 PM	70.6	84.2	69.8
03:00 PM - 04:00 PM	70.8	85.0	70.2
04:00 PM - 05:00 PM	70.8	85.0	70.2

Leq Average 8 hrs. (dB(A))

70.7

Lmax (dB(A))

85.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496091-1

Page 1 of 1

Sample Number 22132690-6
Parameter Noise (Leq 8 hrs.)
Location Boiler
Measurement Date Nov 08, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	82.9	86.8	81.8
10:00 AM - 11:00 AM	82.6	86.7	81.6
11:00 AM - 12:00 PM	82.9	86.9	81.9
12:00 PM - 01:00 PM	82.8	87.0	82.1
01:00 PM - 02:00 PM	83.5	87.2	82.5
02:00 PM - 03:00 PM	83.3	87.2	82.3
03:00 PM - 04:00 PM	83.4	88.1	82.0
04:00 PM - 05:00 PM	83.5	87.6	82.1

Leq Average 8 hrs. (dB(A))

83.1

Lmax (dB(A))

88.1

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

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Thanita Kulsuriwong
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Approved by

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Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496092-1

Page 1 of 1

Sample Number	22132690-7
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	Nov 09, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	83.3	87.1	82.3
10:00 AM - 11:00 AM	82.4	86.5	81.7
11:00 AM - 12:00 PM	82.9	86.6	82.0
12:00 PM - 01:00 PM	83.3	87.9	81.9
01:00 PM - 02:00 PM	82.8	86.6	81.9
02:00 PM - 03:00 PM	82.7	86.5	82.0
03:00 PM - 04:00 PM	82.6	86.7	81.7
04:00 PM - 05:00 PM	82.2	86.2	81.5
Leq Average 8 hrs. (dB(A))	82.8		
Lmax (dB(A))		87.9	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือการวัดเสียง ในการประกอบกิจการโรงงานที่เกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496093-1

Page 1 of 1

Sample Number	22132690-8
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	82.8	87.0	82.0
10:00 AM - 11:00 AM	82.6	86.9	81.7
11:00 AM - 12:00 PM	82.7	87.6	81.8
12:00 PM - 01:00 PM	82.7	86.5	81.8
01:00 PM - 02:00 PM	83.1	87.0	82.3
02:00 PM - 03:00 PM	83.7	87.3	82.5
03:00 PM - 04:00 PM	83.5	87.7	82.6
04:00 PM - 05:00 PM	83.1	87.1	82.4
Leq Average 8 hrs. (dB(A))	83.0		
Lmax (dB(A))		87.7	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือการวัดเสียง ในการประกอบกิจการโรงงานที่เกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita Kulsuriwong
Scientist (4)

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Supot S.

Supot Salamteh
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496094-1

Page 1 of 1

Sample Number	22132690-9
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	Nov 11, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	83.8	87.4	83.1
10:00 AM - 11:00 AM	83.8	87.8	83.1
11:00 AM - 12:00 PM	83.7	88.1	81.9
12:00 PM - 01:00 PM	83.9	87.8	82.4
01:00 PM - 02:00 PM	83.7	87.6	82.4
02:00 PM - 03:00 PM	83.8	88.7	82.8
03:00 PM - 04:00 PM	83.4	87.7	82.4
04:00 PM - 05:00 PM	82.8	87.4	81.2

Leq Average 8 hrs. (dB(A))

83.6

Lmax (dB(A))

88.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดภัย
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Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496095-1

Page 1 of 1

Sample Number	22132690-10
Parameter	Noise (Leq 8 hrs.)
Location	Boiler
Measurement Date	Nov 12, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	82.2	86.7	81.3
10:00 AM - 11:00 AM	82.5	86.9	81.5
11:00 AM - 12:00 PM	82.3	86.7	81.5
12:00 PM - 01:00 PM	82.7	87.1	81.5
01:00 PM - 02:00 PM	82.6	86.8	81.7
02:00 PM - 03:00 PM	82.8	87.1	81.8
03:00 PM - 04:00 PM	82.7	87.2	81.5
04:00 PM - 05:00 PM	83.1	87.4	82.3

Leq Average 8 hrs. (dB(A))

82.6

Lmax (dB(A))

87.4

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496096-1

Page 1 of 1

Sample Number 22132690-11
Parameter Noise (Leq 8 hrs.)
Location Turbine
Measurement Date Nov 08, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	86.4	87.7	86.1
10:00 AM - 11:00 AM	86.2	87.3	86.0
11:00 AM - 12:00 PM	86.3	87.3	86.0
12:00 PM - 01:00 PM	86.5	87.8	86.2
01:00 PM - 02:00 PM	86.6	87.8	86.3
02:00 PM - 03:00 PM	86.8	88.0	86.4
03:00 PM - 04:00 PM	86.6	87.8	86.3
04:00 PM - 05:00 PM	86.7	87.6	86.4

Leq Average 8 hrs. (dB(A))

86.5

Lmax (dB(A))

88.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496097-1

Page 1 of 1

Sample Number 22132690-12
Parameter Noise (Leq 8 hrs.)
Location Turbine
Measurement Date Nov 09, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	86.7	87.6	86.5
10:00 AM - 11:00 AM	86.7	87.6	86.5
11:00 AM - 12:00 PM	86.7	87.8	86.5
12:00 PM - 01:00 PM	86.7	87.8	86.4
01:00 PM - 02:00 PM	86.7	87.8	86.5
02:00 PM - 03:00 PM	86.7	87.6	86.5
03:00 PM - 04:00 PM	86.7	87.6	86.5
04:00 PM - 05:00 PM	86.8	87.7	86.5

Leq Average 8 hrs. (dB(A))

86.7

Lmax (dB(A))

87.8

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong

Scientist (4)

Approved by

Supot S.

Supot Salamteh

Section Head

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Thanita K.

Thanita Kulsuriwong

Scientist (4)

Approved by

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Supot Salamteh

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496098-1

Page 1 of 1

Sample Number	22132690-13
Parameter	Noise (Leq 8 hrs.)
Location	Turbine
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	86.7	87.6	86.5
10:00 AM - 11:00 AM	86.8	87.8	86.5
11:00 AM - 12:00 PM	86.7	88.0	86.4
12:00 PM - 01:00 PM	86.7	88.0	86.5
01:00 PM - 02:00 PM	86.6	87.8	86.4
02:00 PM - 03:00 PM	86.5	87.4	86.3
03:00 PM - 04:00 PM	86.4	87.2	86.1
04:00 PM - 05:00 PM	86.3	87.0	86.1

Leq Average 8 hrs. (dB(A))

86.6

Lmax (dB(A))

88.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496099-1

Page 1 of 1

Sample Number	22132690-14
Parameter	Noise (Leq 8 hrs.)
Location	Turbine
Measurement Date	Nov 11, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	86.5	87.3	86.3
10:00 AM - 11:00 AM	86.6	87.4	86.3
11:00 AM - 12:00 PM	86.5	87.4	86.3
12:00 PM - 01:00 PM	86.6	87.5	86.4
01:00 PM - 02:00 PM	86.6	87.5	86.3
02:00 PM - 03:00 PM	86.7	87.8	86.5
03:00 PM - 04:00 PM	86.7	87.7	86.5
04:00 PM - 05:00 PM	86.7	87.6	86.5

Leq Average 8 hrs. (dB(A))

86.6

Lmax (dB(A))

87.8

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Supot Salamteh
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496100-1

Page 1 of 1

Sample Number	22132690-15
Parameter	Noise (Leq 8 hrs.)
Location	Turbine
Measurement Date	Nov 12, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	86.7	87.3	86.5
10:00 AM - 11:00 AM	86.6	87.4	86.4
11:00 AM - 12:00 PM	86.6	87.7	86.4
12:00 PM - 01:00 PM	86.6	87.8	86.4
01:00 PM - 02:00 PM	86.6	87.6	86.3
02:00 PM - 03:00 PM	86.7	88.1	86.4
03:00 PM - 04:00 PM	86.4	87.6	86.2
04:00 PM - 05:00 PM	86.4	87.3	86.2

Leq Average 8 hrs. (dB(A))

86.6

Lmax (dB(A))

88.1

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496101-1

Page 1 of 1

Sample Number	22132690-16
Parameter	Noise (Leq 8 hrs.)
Location	อาคารบนดาดฟ้า
Measurement Date	Nov 08, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	88.7	90.8	88.3
10:00 AM - 11:00 AM	88.8	91.4	88.4
11:00 AM - 12:00 PM	89.0	90.9	88.6
12:00 PM - 01:00 PM	88.5	90.1	88.1
01:00 PM - 02:00 PM	88.4	90.7	88.1
02:00 PM - 03:00 PM	88.4	90.8	88.1
03:00 PM - 04:00 PM	88.5	91.7	88.1
04:00 PM - 05:00 PM	88.4	90.2	88.1

Leq Average 8 hrs. (dB(A))

88.6

Lmax (dB(A))

91.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamtch
Section Head

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Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamtch
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496102-1

Page 1 of 1

Sample Number	22132690-17
Parameter	Noise (Leq 8 hrs.)
Location	อาคารบดถ่านหิน
Measurement Date	Nov 09, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	88.6	90.7	88.2
10:00 AM - 11:00 AM	88.1	89.7	87.8
11:00 AM - 12:00 PM	88.0	89.8	87.6
12:00 PM - 01:00 PM	87.9	89.4	87.6
01:00 PM - 02:00 PM	87.8	89.4	87.5
02:00 PM - 03:00 PM	88.6	90.6	88.2
03:00 PM - 04:00 PM	88.5	90.1	88.1
04:00 PM - 05:00 PM	88.7	90.3	88.3

Leq Average 8 hrs. (dB(A))

88.3

Lmax (dB(A))

90.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496103-1

Page 1 of 1

Sample Number	22132690-18
Parameter	Noise (Leq 8 hrs.)
Location	อาคารบดถ่านหิน
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	88.3	90.1	87.9
10:00 AM - 11:00 AM	88.2	89.5	87.9
11:00 AM - 12:00 PM	88.4	90.1	88.1
12:00 PM - 01:00 PM	88.5	89.8	88.2
01:00 PM - 02:00 PM	88.3	89.3	88.0
02:00 PM - 03:00 PM	88.3	89.5	88.0
03:00 PM - 04:00 PM	88.1	89.2	87.9
04:00 PM - 05:00 PM	88.3	89.6	88.0

Leq Average 8 hrs. (dB(A))

88.3

Lmax (dB(A))

90.1

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salameh
Section Head

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Thanita Kulsuriwong
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496104-1

Page 1 of 1

Sample Number	22132690-19
Parameter	Noise (Leq 8 hrs.)
Location	อาคารรถผ่าน
Measurement Date	Nov 11, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	88.2	89.7	87.9
10:00 AM - 11:00 AM	88.2	90.3	87.9
11:00 AM - 12:00 PM	88.1	90.9	87.8
12:00 PM - 01:00 PM	88.1	89.9	87.9
01:00 PM - 02:00 PM	88.4	89.8	88.0
02:00 PM - 03:00 PM	88.2	90.6	87.9
03:00 PM - 04:00 PM	88.4	89.8	88.1
04:00 PM - 05:00 PM	88.2	89.5	87.8

Leq Average 8 hrs. (dB(A))

88.2

Lmax (dB(A))

90.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดภัย

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132690

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496105-1

Page 1 of 1

Sample Number	22132690-20
Parameter	Noise (Leq 8 hrs.)
Location	อาคารรถผ่าน
Measurement Date	Nov 12, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.9	89.3	87.6
10:00 AM - 11:00 AM	87.8	89.2	87.5
11:00 AM - 12:00 PM	88.0	90.2	87.5
12:00 PM - 01:00 PM	88.2	90.0	87.8
01:00 PM - 02:00 PM	88.7	90.9	88.1
02:00 PM - 03:00 PM	88.8	93.7	88.3
03:00 PM - 04:00 PM	88.7	90.6	88.2
04:00 PM - 05:00 PM	88.5	90.7	88.0

Leq Average 8 hrs. (dB(A))

88.3

Lmax (dB(A))

93.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita Kulsuriwong
Scientist (4)

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Supot Salamteh
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293868
 Date Received : Aug 22, 2022
 Date Reported : Aug 26, 2022
 Report Number: 2413322-1

Page 1 of 1

Sample Number 2293868-1
Parameter Noise (Leq 8 hrs.)
Location Boiler Feed Pump Turbine A
Measurement Date Aug 17, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.0	90.7	88.2
11:00 AM - 12:00 PM	89.1	90.7	88.3
12:00 PM - 01:00 PM	89.4	90.7	88.9
01:00 PM - 02:00 PM	89.4	91.0	88.6
02:00 PM - 03:00 PM	89.1	90.8	88.3
03:00 PM - 04:00 PM	89.0	90.6	88.3
04:00 PM - 05:00 PM	89.3	90.9	88.5
05:00 PM - 06:00 PM	89.2	91.0	88.4

Leq Average 8 hrs. (dB(A)) 89.2
 Lmax (dB(A)) 91.0
 Standard (dB(A)) 90
 Reference Method : ISO1996-1 and 1996-2
 Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293868
 Date Received : Aug 22, 2022
 Date Reported : Aug 26, 2022
 Report Number: 2413323-1

Page 1 of 1

Sample Number 2293868-2
Parameter Noise (Leq 8 hrs.)
Location Boiler Feed Pump Turbine A
Measurement Date Aug 18, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.2	91.0	88.4
11:00 AM - 12:00 PM	89.3	91.3	88.4
12:00 PM - 01:00 PM	89.4	91.3	88.4
01:00 PM - 02:00 PM	89.5	91.3	88.6
02:00 PM - 03:00 PM	89.4	91.5	88.6
03:00 PM - 04:00 PM	89.2	91.4	88.5
04:00 PM - 05:00 PM	89.1	91.1	88.4
05:00 PM - 06:00 PM	89.3	91.0	88.6

Leq Average 8 hrs. (dB(A)) 89.3
 Lmax (dB(A)) 91.5
 Standard (dB(A)) 90
 Reference Method : ISO1996-1 and 1996-2
 Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
 Scientist (4)

Approved by

Supot S.

Supot Salamteh
 Section Head

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P/O :

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Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413324-1

Page 1 of 1

Sample Number	2293868-3
Parameter	Noise (Leq 8 hrs.)
Location	Boiler Feed Pump Turbine A
Measurement Date	Aug 19, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.1	90.9	88.3
11:00 AM - 12:00 PM	89.2	91.2	88.3
12:00 PM - 01:00 PM	89.3	91.2	88.3
01:00 PM - 02:00 PM	89.4	91.2	88.5
02:00 PM - 03:00 PM	89.3	91.4	88.5
03:00 PM - 04:00 PM	89.1	91.3	88.4
04:00 PM - 05:00 PM	89.3	90.9	88.6
05:00 PM - 06:00 PM	89.2	90.8	88.5

Leq Average 8 hrs. (dB(A))

89.2

Lmax (dB(A))

91.4

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413325-1

Page 1 of 1

Sample Number	2293868-4
Parameter	Noise (Leq 8 hrs.)
Location	Boiler Feed Pump Turbine B
Measurement Date	Aug 17, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.7	92.2	87.8
11:00 AM - 12:00 PM	89.6	92.3	87.9
12:00 PM - 01:00 PM	90.0	92.3	88.2
01:00 PM - 02:00 PM	89.8	92.3	88.2
02:00 PM - 03:00 PM	89.7	92.2	87.7
03:00 PM - 04:00 PM	89.7	92.5	88.0
04:00 PM - 05:00 PM	89.6	92.4	87.7
05:00 PM - 06:00 PM	89.9	92.3	88.1

Leq Average 8 hrs. (dB(A))

89.8

Lmax (dB(A))

92.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
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Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413326-1

Page 1 of 1

Sample Number 2293868-5
Parameter Noise (Leq 8 hrs.)
Location Boiler Feed Pump Turbine B
Measurement Date Aug 18, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	90.1	92.1	88.4
11:00 AM - 12:00 PM	88.9	91.9	87.6
12:00 PM - 01:00 PM	89.8	91.9	87.7
01:00 PM - 02:00 PM	90.0	92.3	88.5
02:00 PM - 03:00 PM	89.5	92.0	87.8
03:00 PM - 04:00 PM	89.4	92.1	87.3
04:00 PM - 05:00 PM	90.0	92.2	87.8
05:00 PM - 06:00 PM	90.1	92.2	88.5

Leq Average 8 hrs. (dB(A))

89.7

Lmax (dB(A))

92.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดพิษ

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Project Name :

Project Location : GHECO-ONE

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Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413327-1

Page 1 of 1

Sample Number 2293868-6
Parameter Noise (Leq 8 hrs.)
Location Boiler Feed Pump Turbine B
Measurement Date Aug 19, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.7	92.7	88.1
11:00 AM - 12:00 PM	90.1	92.0	88.7
12:00 PM - 01:00 PM	90.2	92.0	88.9
01:00 PM - 02:00 PM	89.9	91.9	88.6
02:00 PM - 03:00 PM	89.9	91.8	89.0
03:00 PM - 04:00 PM	89.8	91.9	88.4
04:00 PM - 05:00 PM	89.7	92.7	88.1
05:00 PM - 06:00 PM	89.5	91.9	87.4

Leq Average 8 hrs. (dB(A))

89.9

Lmax (dB(A))

92.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการควบคุมความปลอดพิษ

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamtah
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
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Supot S.

Supot Salamtah
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413328-1

Page 1 of 1

Sample Number 2293868-7
Parameter Noise (Leq 8 hrs.)
Location Pulverizer A-B
Measurement Date Aug 17, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.5	87.7	86.2
11:00 AM - 12:00 PM	86.4	87.4	86.2
12:00 PM - 01:00 PM	86.3	87.4	86.1
01:00 PM - 02:00 PM	86.3	87.6	86.1
02:00 PM - 03:00 PM	86.3	87.6	86.1
03:00 PM - 04:00 PM	86.2	87.5	86.0
04:00 PM - 05:00 PM	86.3	87.5	86.1
05:00 PM - 06:00 PM	86.4	88.0	86.1

Leq Average 8 hrs. (dB(A))

86.3

Lmax (dB(A))

88.0

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413329-1

Page 1 of 1

Sample Number 2293868-8
Parameter Noise (Leq 8 hrs.)
Location Pulverizer A-B
Measurement Date Aug 18, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.4	87.9	86.2
11:00 AM - 12:00 PM	86.4	87.6	86.2
12:00 PM - 01:00 PM	86.3	87.3	86.0
01:00 PM - 02:00 PM	86.3	88.9	86.0
02:00 PM - 03:00 PM	86.3	87.4	86.0
03:00 PM - 04:00 PM	86.3	87.5	86.1
04:00 PM - 05:00 PM	86.3	87.6	86.1
05:00 PM - 06:00 PM	86.2	87.6	86.0

Leq Average 8 hrs. (dB(A))

86.3

Lmax (dB(A))

88.9

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Supot S.

Supot Salamteh
Section Head

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413330-1

Page 1 of 1

Sample Number	2293868-9
Parameter	Noise (Leq 8 hrs.)
Location	Pulverizer A-B
Measurement Date	Aug 19, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.4	87.7	86.1
11:00 AM - 12:00 PM	86.3	87.7	86.1
12:00 PM - 01:00 PM	86.5	89.3	86.2
01:00 PM - 02:00 PM	86.1	88.4	85.6
02:00 PM - 03:00 PM	85.8	87.0	85.6
03:00 PM - 04:00 PM	85.7	87.0	85.5
04:00 PM - 05:00 PM	85.8	87.2	85.5
05:00 PM - 06:00 PM	85.8	87.2	85.5

Leq Average 8 hrs. (dB(A))

86.1

Lmax (dB(A))

89.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413331-1

Page 1 of 1

Sample Number	2293868-10
Parameter	Noise (Leq 8 hrs.)
Location	Pulverizer E-F
Measurement Date	Aug 17, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	88.2	90.5	87.9
11:00 AM - 12:00 PM	88.3	90.7	87.9
12:00 PM - 01:00 PM	88.2	90.8	87.8
01:00 PM - 02:00 PM	88.3	90.9	87.8
02:00 PM - 03:00 PM	88.3	91.0	87.8
03:00 PM - 04:00 PM	88.3	90.2	87.9
04:00 PM - 05:00 PM	88.3	90.6	87.9
05:00 PM - 06:00 PM	88.4	90.5	88.0

Leq Average 8 hrs. (dB(A))

88.3

Lmax (dB(A))

91.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salameh
Section Head

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Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salameh
Section Head

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413332-1

Page 1 of 1

Sample Number 2293868-11
Parameter Noise (Leq 8 hrs.)
Location Pulverizer E-F
Measurement Date Aug 18, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	88.0	90.7	87.7
11:00 AM - 12:00 PM	88.2	90.5	87.8
12:00 PM - 01:00 PM	88.0	91.0	87.6
01:00 PM - 02:00 PM	88.0	90.1	87.6
02:00 PM - 03:00 PM	88.0	89.8	87.7
03:00 PM - 04:00 PM	88.0	90.1	87.6
04:00 PM - 05:00 PM	88.0	90.4	87.6
05:00 PM - 06:00 PM	88.0	90.5	87.6

Leq Average 8 hrs. (dB(A))

88.0

Lmax (dB(A))

91.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413333-1

Page 1 of 1

Sample Number 2293868-12
Parameter Noise (Leq 8 hrs.)
Location Pulverizer E-F
Measurement Date Aug 19, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	88.3	90.5	88.0
11:00 AM - 12:00 PM	88.2	90.1	87.9
12:00 PM - 01:00 PM	88.1	90.1	87.8
01:00 PM - 02:00 PM	88.0	90.5	87.7
02:00 PM - 03:00 PM	88.0	90.1	87.7
03:00 PM - 04:00 PM	87.9	89.7	87.5
04:00 PM - 05:00 PM	87.6	89.5	87.3
05:00 PM - 06:00 PM	87.3	90.3	86.9

Leq Average 8 hrs. (dB(A))

87.9

Lmax (dB(A))

90.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413334-1

Page 1 of 1

Sample Number	2293868-13
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan A
Measurement Date	Aug 17, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.9	91.4	85.8
11:00 AM - 12:00 PM	87.2	91.0	85.9
12:00 PM - 01:00 PM	87.2	91.4	85.9
01:00 PM - 02:00 PM	87.0	91.0	85.8
02:00 PM - 03:00 PM	87.7	92.0	86.3
03:00 PM - 04:00 PM	86.7	90.5	85.6
04:00 PM - 05:00 PM	86.5	90.6	85.5
05:00 PM - 06:00 PM	86.9	91.3	85.7

Leq Average 8 hrs. (dB(A))

87.0

Lmax (dB(A))

92.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
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Supot Salamteh
Section Head

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413335-1

Page 1 of 1

Sample Number	2293868-14
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan A
Measurement Date	Aug 18, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.6	91.7	85.6
11:00 AM - 12:00 PM	86.8	91.4	85.6
12:00 PM - 01:00 PM	86.6	90.7	85.5
01:00 PM - 02:00 PM	86.6	90.8	85.5
02:00 PM - 03:00 PM	86.6	92.0	85.6
03:00 PM - 04:00 PM	86.6	90.3	85.7
04:00 PM - 05:00 PM	86.6	91.6	85.7
05:00 PM - 06:00 PM	86.7	90.9	85.6

Leq Average 8 hrs. (dB(A))

86.6

Lmax (dB(A))

92.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413336-1

Page 1 of 1

Sample Number	2293868-15
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan A
Measurement Date	Aug 19, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	87.2	91.7	86.1
11:00 AM - 12:00 PM	87.1	92.0	86.0
12:00 PM - 01:00 PM	86.8	90.7	85.8
01:00 PM - 02:00 PM	87.4	91.4	86.2
02:00 PM - 03:00 PM	87.4	91.2	86.3
03:00 PM - 04:00 PM	87.5	91.6	86.3
04:00 PM - 05:00 PM	87.1	91.5	86.0
05:00 PM - 06:00 PM	87.1	90.8	86.0

Leq Average 8 hrs. (dB(A))

87.2

Lmax (dB(A))

92.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413337-1

Page 1 of 1

Sample Number	2293868-16
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan B
Measurement Date	Aug 18, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.1	93.7	87.7
11:00 AM - 12:00 PM	89.0	94.5	87.7
12:00 PM - 01:00 PM	89.4	93.8	87.9
01:00 PM - 02:00 PM	89.2	93.9	87.8
02:00 PM - 03:00 PM	89.4	94.4	87.9
03:00 PM - 04:00 PM	89.5	93.7	88.0
04:00 PM - 05:00 PM	89.4	94.1	88.0
05:00 PM - 06:00 PM	89.1	93.1	87.7

Leq Average 8 hrs. (dB(A))

89.3

Lmax (dB(A))

94.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413338-1

Page 1 of 1

Sample Number	2293868-17
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan B
Measurement Date	Aug 19, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.4	93.7	88.0
11:00 AM - 12:00 PM	89.5	93.9	88.0
12:00 PM - 01:00 PM	89.2	93.5	87.7
01:00 PM - 02:00 PM	89.6	94.1	88.1
02:00 PM - 03:00 PM	89.7	94.5	88.2
03:00 PM - 04:00 PM	89.5	93.9	88.0
04:00 PM - 05:00 PM	89.6	95.8	88.1
05:00 PM - 06:00 PM	89.4	94.6	87.9

Leq Average 8 hrs. (dB(A))

89.5

Lmax (dB(A))

95.8

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413339-1

Page 1 of 1

Sample Number	2293868-18
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan B
Measurement Date	Aug 20, 2022
Measurement by	Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	89.2	93.3	87.9
11:00 AM - 12:00 PM	89.2	93.6	87.8
12:00 PM - 01:00 PM	89.2	94.6	87.9
01:00 PM - 02:00 PM	89.2	93.0	88.0
02:00 PM - 03:00 PM	89.3	93.9	88.0
03:00 PM - 04:00 PM	89.4	93.8	88.1
04:00 PM - 05:00 PM	89.5	93.5	88.2
05:00 PM - 06:00 PM	89.4	93.5	88.1

Leq Average 8 hrs. (dB(A))

89.3

Lmax (dB(A))

94.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong

Scientist (4)

Approved by

Supot S.

Supot Salamteh

Section Head

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Thanita K.

Thanita Kulsuriwong

Scientist (4)

Approved by

Supot S.

Supot Salamteh

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413340-1

Page 1 of 1

Sample Number 2293868-19
Parameter Noise (Leq 8 hrs.)
Location ID Fan A
Measurement Date Aug 17, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	83.0	91.5	82.4
11:00 AM - 12:00 PM	82.6	89.7	82.1
12:00 PM - 01:00 PM	82.5	86.5	82.0
01:00 PM - 02:00 PM	82.9	84.1	82.4
02:00 PM - 03:00 PM	83.0	84.6	82.6
03:00 PM - 04:00 PM	83.1	84.5	82.7
04:00 PM - 05:00 PM	82.9	84.3	82.4
05:00 PM - 06:00 PM	83.1	84.5	82.6

Leq Average 8 hrs. (dB(A)) 82.9
Lmax (dB(A)) 91.5
Standard (dB(A)) 90
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413341-1

Page 1 of 1

Sample Number 2293868-20
Parameter Noise (Leq 8 hrs.)
Location ID Fan A
Measurement Date Aug 18, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	82.8	91.2	82.2
11:00 AM - 12:00 PM	82.3	83.5	81.9
12:00 PM - 01:00 PM	82.7	84.4	82.1
01:00 PM - 02:00 PM	83.0	84.2	82.5
02:00 PM - 03:00 PM	83.0	84.3	82.7
03:00 PM - 04:00 PM	82.9	84.3	82.5
04:00 PM - 05:00 PM	82.9	84.4	82.5
05:00 PM - 06:00 PM	83.1	91.2	82.6

Leq Average 8 hrs. (dB(A)) 82.8
Lmax (dB(A)) 91.2
Standard (dB(A)) 90
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413342-1

Page 1 of 1

Sample Number 2293868-21
Parameter Noise (Leq 8 hrs.)
Location ID Fan A
Measurement Date Aug 19, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	82.7	84.1	82.2
11:00 AM - 12:00 PM	82.5	86.2	82.0
12:00 PM - 01:00 PM	82.3	83.8	81.8
01:00 PM - 02:00 PM	82.7	84.0	82.3
02:00 PM - 03:00 PM	82.8	84.0	82.4
03:00 PM - 04:00 PM	82.8	84.4	82.4
04:00 PM - 05:00 PM	82.7	84.4	82.2
05:00 PM - 06:00 PM	82.8	84.3	82.3

Leq Average 8 hrs. (dB(A))

82.7

Lmax (dB(A))

86.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413343-1

Page 1 of 1

Sample Number 2293868-22
Parameter Noise (Leq 8 hrs.)
Location ID Fan B
Measurement Date Aug 17, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	83.9	85.8	83.1
11:00 AM - 12:00 PM	83.6	85.6	83.0
12:00 PM - 01:00 PM	83.8	85.7	83.1
01:00 PM - 02:00 PM	83.5	85.3	82.7
02:00 PM - 03:00 PM	83.3	85.4	82.4
03:00 PM - 04:00 PM	84.2	86.5	83.4
04:00 PM - 05:00 PM	83.9	87.3	83.1
05:00 PM - 06:00 PM	83.7	85.3	82.9

Leq Average 8 hrs. (dB(A))

83.7

Lmax (dB(A))

87.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413344-1

Page 1 of 1

Sample Number 2293868-23
Parameter Noise (Leq 8 hrs.)
Location ID Fan B
Measurement Date Aug 18, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	83.9	85.4	83.2
11:00 AM - 12:00 PM	83.5	85.1	82.9
12:00 PM - 01:00 PM	83.2	86.1	82.5
01:00 PM - 02:00 PM	82.8	84.8	82.1
02:00 PM - 03:00 PM	83.6	85.8	82.5
03:00 PM - 04:00 PM	83.8	86.1	83.0
04:00 PM - 05:00 PM	84.0	86.0	83.2
05:00 PM - 06:00 PM	84.3	86.3	83.5

Leq Average 8 hrs. (dB(A))

83.7

Lmax (dB(A))

86.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413345-1

Page 1 of 1

Sample Number 2293868-24
Parameter Noise (Leq 8 hrs.)
Location ID Fan B
Measurement Date Aug 19, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	84.3	85.7	83.6
11:00 AM - 12:00 PM	83.8	85.7	83.1
12:00 PM - 01:00 PM	83.5	85.6	82.7
01:00 PM - 02:00 PM	83.6	85.6	82.9
02:00 PM - 03:00 PM	83.0	84.7	82.3
03:00 PM - 04:00 PM	84.0	86.2	83.2
04:00 PM - 05:00 PM	84.2	86.2	83.5
05:00 PM - 06:00 PM	84.3	86.3	83.5

Leq Average 8 hrs. (dB(A))

83.9

Lmax (dB(A))

86.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413346-1

Page 1 of 1

Sample Number 2293868-25
Parameter Noise (Leq 8 hrs.)
Location FGD Air Blower
Measurement Date Aug 17, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	84.1	85.7	83.7
11:00 AM - 12:00 PM	84.0	85.6	83.6
12:00 PM - 01:00 PM	84.0	85.6	83.6
01:00 PM - 02:00 PM	84.0	86.1	83.6
02:00 PM - 03:00 PM	84.0	85.8	83.6
03:00 PM - 04:00 PM	84.0	85.8	83.7
04:00 PM - 05:00 PM	83.9	85.3	83.6
05:00 PM - 06:00 PM	84.0	85.5	83.6

Leq Average 8 hrs. (dB(A))

84.0

Lmax (dB(A))

86.1

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413347-1

Page 1 of 1

Sample Number 2293868-26
Parameter Noise (Leq 8 hrs.)
Location FGD Air Blower
Measurement Date Aug 18, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	84.1	86.1	83.7
11:00 AM - 12:00 PM	84.0	85.7	83.6
12:00 PM - 01:00 PM	83.9	87.7	83.5
01:00 PM - 02:00 PM	84.1	86.1	83.7
02:00 PM - 03:00 PM	84.1	85.9	83.7
03:00 PM - 04:00 PM	84.1	85.8	83.7
04:00 PM - 05:00 PM	84.1	85.9	83.7
05:00 PM - 06:00 PM	84.1	85.8	83.7

Leq Average 8 hrs. (dB(A))

84.1

Lmax (dB(A))

87.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413348-1

Page 1 of 1

Sample Number 2293868-27
Parameter Noise (Leq 8 hrs.)
Location FGD Air Blower
Measurement Date Aug 19, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	84.0	85.8	83.6
11:00 AM - 12:00 PM	84.0	85.9	83.5
12:00 PM - 01:00 PM	84.0	85.6	83.6
01:00 PM - 02:00 PM	84.2	86.6	83.8
02:00 PM - 03:00 PM	84.2	86.0	83.8
03:00 PM - 04:00 PM	84.1	85.8	83.7
04:00 PM - 05:00 PM	84.1	86.1	83.7
05:00 PM - 06:00 PM	84.0	85.8	83.7

Leq Average 8 hrs. (dB(A))

84.1

Lmax (dB(A))

86.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือวัดความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-S Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413349-1

Page 1 of 1

Sample Number 2293868-28
Parameter Noise (Leq 8 hrs.)
Location Condenser
Measurement Date Aug 17, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	86.1	88.2	85.7
11:00 AM - 12:00 PM	85.8	87.8	85.4
12:00 PM - 01:00 PM	86.3	88.4	85.7
01:00 PM - 02:00 PM	86.3	88.2	85.9
02:00 PM - 03:00 PM	86.1	88.2	85.7
03:00 PM - 04:00 PM	86.1	88.0	85.7
04:00 PM - 05:00 PM	85.9	88.3	84.9
05:00 PM - 06:00 PM	86.6	88.8	86.1

Leq Average 8 hrs. (dB(A))

86.2

Lmax (dB(A))

88.8

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือวัดความปลอดภัย

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Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413350-1

Page 1 of 1

Sample Number 2293868-29
Parameter Noise (Leq 8 hrs.)
Location Condenser
Measurement Date Aug 18, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	87.2	89.0	86.7
11:00 AM - 12:00 PM	87.1	89.1	86.6
12:00 PM - 01:00 PM	87.2	89.0	86.8
01:00 PM - 02:00 PM	87.4	101.8	86.9
02:00 PM - 03:00 PM	87.2	88.8	86.7
03:00 PM - 04:00 PM	87.1	88.8	86.8
04:00 PM - 05:00 PM	87.3	89.0	86.9
05:00 PM - 06:00 PM	87.3	89.1	86.9

Leq Average 8 hrs. (dB(A))

87.2

Lmax (dB(A))

101.8

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293868

Date Received : Aug 22, 2022

Date Reported : Aug 26, 2022

Report Number: 2413351-1

Page 1 of 1

Sample Number 2293868-30
Parameter Noise (Leq 8 hrs.)
Location Condenser
Measurement Date Aug 19, 2022
Measurement by Tarin Octjinda

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
10:00 AM - 11:00 AM	85.9	88.8	85.5
11:00 AM - 12:00 PM	86.3	88.3	85.7
12:00 PM - 01:00 PM	86.1	88.0	85.7
01:00 PM - 02:00 PM	86.0	88.0	85.6
02:00 PM - 03:00 PM	85.7	87.7	85.3
03:00 PM - 04:00 PM	85.9	88.0	85.3
04:00 PM - 05:00 PM	86.6	88.7	86.1
05:00 PM - 06:00 PM	86.2	88.0	85.7

Leq Average 8 hrs. (dB(A))

86.1

Lmax (dB(A))

88.8

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496119-1

Page 1 of 1

Sample Number	22132730-1
Parameter	Noise (Leq 8 hrs.)
Location	Boiler Feed Pump Turbine A
Measurement Date	Nov 08, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	88.4	92.0	86.9
10:00 AM - 11:00 AM	88.6	91.8	86.9
11:00 AM - 12:00 PM	88.0	92.0	86.4
12:00 PM - 01:00 PM	88.0	91.4	86.6
01:00 PM - 02:00 PM	87.9	91.2	86.4
02:00 PM - 03:00 PM	87.9	90.5	86.8
03:00 PM - 04:00 PM	87.8	90.7	86.6
04:00 PM - 05:00 PM	87.8	90.7	86.3

Leq Average 8 hrs. (dB(A))

88.1

Lmax (dB(A))

92.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือการวัดเสียง
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Client : GHECO-ONE COMPANY LIMITED

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496120-1

Page 1 of 1

Sample Number	22132730-2
Parameter	Noise (Leq 8 hrs.)
Location	Boiler Feed Pump Turbine A
Measurement Date	Nov 09, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.6	91.3	86.0
10:00 AM - 11:00 AM	87.6	91.2	86.1
11:00 AM - 12:00 PM	87.7	90.5	86.3
12:00 PM - 01:00 PM	87.3	90.1	85.8
01:00 PM - 02:00 PM	87.1	90.4	85.8
02:00 PM - 03:00 PM	87.8	90.7	86.6
03:00 PM - 04:00 PM	87.6	90.6	86.4
04:00 PM - 05:00 PM	87.3	90.5	86.0

Leq Average 8 hrs. (dB(A))

87.5

Lmax (dB(A))

91.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือการวัดเสียง
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496121-1

Page 1 of 1

Sample Number	22132730-3
Parameter	Noise (Leq 8 hrs.)
Location	Boiler Feed Pump Turbine A
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	88.0	90.5	86.8
10:00 AM - 11:00 AM	88.3	90.8	87.0
11:00 AM - 12:00 PM	88.0	90.6	87.1
12:00 PM - 01:00 PM	87.8	90.7	86.2
01:00 PM - 02:00 PM	87.8	90.6	86.1
02:00 PM - 03:00 PM	88.2	90.2	87.3
03:00 PM - 04:00 PM	88.1	90.8	87.0
04:00 PM - 05:00 PM	88.0	91.3	86.7

Leq Average 8 hrs. (dB(A))

88.0

Lmax (dB(A))

91.3

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496122-1

Page 1 of 1

Sample Number	22132730-4
Parameter	Noise (Leq 8 hrs.)
Location	Boiler Feed Pump Turbine B
Measurement Date	Nov 08, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	89.1	91.9	87.5
10:00 AM - 11:00 AM	88.6	92.5	87.0
11:00 AM - 12:00 PM	89.0	92.5	87.3
12:00 PM - 01:00 PM	88.4	91.7	86.5
01:00 PM - 02:00 PM	88.2	91.6	86.4
02:00 PM - 03:00 PM	89.0	93.9	87.2
03:00 PM - 04:00 PM	89.0	92.9	87.3
04:00 PM - 05:00 PM	88.9	93.0	87.4

Leq Average 8 hrs. (dB(A))

88.8

Lmax (dB(A))

93.9

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsunwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsunwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496123-1

Page 1 of 1

Sample Number	22132730-5
Parameter	Noise (Leq 8 hrs.)
Location	Boiler Feed Pump Turbine B
Measurement Date	Nov 09, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	89.1	91.5	87.6
10:00 AM - 11:00 AM	89.0	91.7	87.6
11:00 AM - 12:00 PM	88.7	91.5	87.5
12:00 PM - 01:00 PM	89.3	91.8	87.2
01:00 PM - 02:00 PM	89.0	91.8	87.3
02:00 PM - 03:00 PM	88.8	90.8	87.7
03:00 PM - 04:00 PM	89.3	91.3	88.3
04:00 PM - 05:00 PM	89.0	92.7	87.7

Leq Average 8 hrs. (dB(A)) 89.0
 Lmax (dB(A)) 92.7
 Standard (dB(A)) 90 140
 Reference Method : ISO1996-1 and 1996-2
 Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือการวัดเสียง
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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496124-1

Page 1 of 1

Sample Number	22132730-6
Parameter	Noise (Leq 8 hrs.)
Location	Boiler Feed Pump Turbine B
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	88.8	91.0	87.7
10:00 AM - 11:00 AM	88.8	92.2	87.4
11:00 AM - 12:00 PM	89.0	92.1	87.7
12:00 PM - 01:00 PM	89.0	91.9	87.8
01:00 PM - 02:00 PM	88.8	91.2	87.7
02:00 PM - 03:00 PM	89.0	92.8	87.8
03:00 PM - 04:00 PM	88.9	91.7	87.7
04:00 PM - 05:00 PM	88.9	92.1	87.2

Leq Average 8 hrs. (dB(A)) 88.9
 Lmax (dB(A)) 92.8
 Standard (dB(A)) 90 140
 Reference Method : ISO1996-1 and 1996-2
 Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานเครื่องมือการวัดเสียง
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Technical Management

Thanita K.

Thanita Kulsuriwong
 Scientist (4)

Approved by

Supot S.

Supot Salamteh
 Section Head

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Technical Management

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132730
Date Received : Nov 15, 2022
Date Reported : Nov 21, 2022
Report Number: 2496125-1

Page 1 of 1

Sample Number 22132730-7
Parameter Noise (Leq 8 hrs.)
Location Pulverizer A-B
Measurement Date Nov 08, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.4	88.4	87.2
10:00 AM - 11:00 AM	87.5	88.6	87.2
11:00 AM - 12:00 PM	87.5	88.5	87.3
12:00 PM - 01:00 PM	87.5	88.6	87.2
01:00 PM - 02:00 PM	87.6	88.5	87.3
02:00 PM - 03:00 PM	87.5	88.9	87.2
03:00 PM - 04:00 PM	87.5	89.7	87.2
04:00 PM - 05:00 PM	87.4	90.7	87.0

Leq Average 8 hrs. (dB(A)) 87.5
Lmax (dB(A)) 90.7
Standard (dB(A)) 90 140
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132730
Date Received : Nov 15, 2022
Date Reported : Nov 21, 2022
Report Number: 2496126-1

Page 1 of 1

Sample Number 22132730-8
Parameter Noise (Leq 8 hrs.)
Location Pulverizer A-B
Measurement Date Nov 09, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.3	88.7	87.1
10:00 AM - 11:00 AM	87.3	89.0	87.1
11:00 AM - 12:00 PM	87.4	93.6	87.2
12:00 PM - 01:00 PM	87.3	88.3	87.1
01:00 PM - 02:00 PM	87.2	88.2	87.1
02:00 PM - 03:00 PM	87.2	89.7	87.0
03:00 PM - 04:00 PM	87.2	88.6	87.0
04:00 PM - 05:00 PM	87.4	90.4	87.2

Leq Average 8 hrs. (dB(A)) 87.3
Lmax (dB(A)) 93.6
Standard (dB(A)) 90 140
Reference Method : ISO1996-1 and 1996-2
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย
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Technical Management

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Thanita Kulsuriwong
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Approved by

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Supot Salamteh
Section Head

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Supot Salamteh
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496127-1

Page 1 of 1

Sample Number	22132730-9
Parameter	Noise (Leq 8 hrs.)
Location	Pulverizer A-B
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.3	88.4	87.1
10:00 AM - 11:00 AM	87.2	88.2	87.0
11:00 AM - 12:00 PM	87.1	88.0	87.0
12:00 PM - 01:00 PM	87.3	88.4	87.1
01:00 PM - 02:00 PM	87.0	88.1	86.8
02:00 PM - 03:00 PM	87.0	88.1	86.8
03:00 PM - 04:00 PM	86.9	88.5	86.7
04:00 PM - 05:00 PM	87.4	88.7	87.2

Leq Average 8 hrs. (dB(A))

87.2

Lmax (dB(A))

88.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496128-1

Page 1 of 1

Sample Number	22132730-10
Parameter	Noise (Leq 8 hrs.)
Location	Pulverizer E-F
Measurement Date	Nov 08, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.3	90.3	87.0
10:00 AM - 11:00 AM	87.4	89.6	87.1
11:00 AM - 12:00 PM	87.4	89.3	87.1
12:00 PM - 01:00 PM	87.6	90.0	87.1
01:00 PM - 02:00 PM	87.7	89.8	87.3
02:00 PM - 03:00 PM	87.7	94.6	87.2
03:00 PM - 04:00 PM	87.9	90.5	87.4
04:00 PM - 05:00 PM	88.1	90.5	87.5

Leq Average 8 hrs. (dB(A))

87.6

Lmax (dB(A))

94.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong

Scientist (4)

Approved by

Supot S.

Supot Salamteh

Section Head

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Supot Salamteh

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496129-1

Page 1 of 1

Sample Number	22132730-11
Parameter	Noise (Leq 8 hrs.)
Location	Pulverizer E-F
Measurement Date	Nov 09, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.8	91.4	87.0
10:00 AM - 11:00 AM	87.4	89.6	87.0
11:00 AM - 12:00 PM	87.4	89.1	87.0
12:00 PM - 01:00 PM	87.4	88.8	87.0
01:00 PM - 02:00 PM	87.6	89.4	87.2
02:00 PM - 03:00 PM	87.5	89.2	87.1
03:00 PM - 04:00 PM	87.5	89.4	87.0
04:00 PM - 05:00 PM	87.6	89.6	87.1

Leq Average 8 hrs. (dB(A))

87.5

Lmax (dB(A))

91.4

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496130-1

Page 1 of 1

Sample Number	22132730-12
Parameter	Noise (Leq 8 hrs.)
Location	Pulverizer E-F
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.4	89.7	87.0
10:00 AM - 11:00 AM	87.3	89.8	86.9
11:00 AM - 12:00 PM	87.3	90.0	86.9
12:00 PM - 01:00 PM	87.1	88.8	86.8
01:00 PM - 02:00 PM	87.1	88.9	86.8
02:00 PM - 03:00 PM	87.3	89.3	87.0
03:00 PM - 04:00 PM	87.4	89.1	87.0
04:00 PM - 05:00 PM	87.4	89.2	87.0

Leq Average 8 hrs. (dB(A))

87.3

Lmax (dB(A))

90.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Scientist (4)

Approved by

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Supot Salamteh
Section Head

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496131-1

Page 1 of 1

Sample Number	22132730-13
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan A
Measurement Date	Nov 08, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	86.8	91.3	86.0
10:00 AM - 11:00 AM	86.9	90.6	86.0
11:00 AM - 12:00 PM	87.1	91.0	86.1
12:00 PM - 01:00 PM	87.6	91.2	86.4
01:00 PM - 02:00 PM	87.2	91.1	86.2
02:00 PM - 03:00 PM	87.7	91.8	86.4
03:00 PM - 04:00 PM	88.4	92.1	86.8
04:00 PM - 05:00 PM	88.3	91.8	87.1

Leq Average 8 hrs. (dB(A))

87.5

Lmax (dB(A))

92.1

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย

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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496132-1

Page 1 of 1

Sample Number	22132730-14
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan A
Measurement Date	Nov 09, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.2	91.5	86.1
10:00 AM - 11:00 AM	87.1	91.2	86.1
11:00 AM - 12:00 PM	87.6	91.2	86.4
12:00 PM - 01:00 PM	88.4	92.3	86.9
01:00 PM - 02:00 PM	88.1	91.8	86.5
02:00 PM - 03:00 PM	88.1	91.5	86.6
03:00 PM - 04:00 PM	88.7	92.6	87.0
04:00 PM - 05:00 PM	88.1	92.3	86.6

Leq Average 8 hrs. (dB(A))

87.9

Lmax (dB(A))

92.6

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย

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Technical Management

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Scientist (4)

Approved by

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Supot Salamteh
Section Head

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Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496133-1

Page 1 of 1

Sample Number	22132730-15
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan A
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	86.9	90.8	86.1
10:00 AM - 11:00 AM	86.6	89.9	85.8
11:00 AM - 12:00 PM	86.6	91.0	85.7
12:00 PM - 01:00 PM	86.9	91.0	85.8
01:00 PM - 02:00 PM	86.7	91.2	85.7
02:00 PM - 03:00 PM	86.8	91.5	85.7
03:00 PM - 04:00 PM	87.1	91.7	85.9
04:00 PM - 05:00 PM	86.8	91.0	85.7

Leq Average 8 hrs. (dB(A))

86.8

Lmax (dB(A))

91.7

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496134-1

Page 1 of 1

Sample Number	22132730-16
Parameter	Noise (Leq 8 hrs.)
Location	PA Fan B
Measurement Date	Nov 08, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	88.3	92.2	86.9
10:00 AM - 11:00 AM	88.3	92.7	87.0
11:00 AM - 12:00 PM	88.2	93.1	86.9
12:00 PM - 01:00 PM	88.6	93.5	87.2
01:00 PM - 02:00 PM	88.8	93.1	87.4
02:00 PM - 03:00 PM	88.7	93.2	87.4
03:00 PM - 04:00 PM	88.9	94.2	87.5
04:00 PM - 05:00 PM	88.3	92.5	87.1

Leq Average 8 hrs. (dB(A))

88.5

Lmax (dB(A))

94.2

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanitak.

Thanita Kulsuriwong
Scientist (4)

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Supot Salamteh
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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496135-1

Page 1 of 1

Sample Number 22132730-17
Parameter Noise (Leq 8 hrs.)
Location PA Fan B
Measurement Date Nov 09, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	88.3	93.8	86.8
10:00 AM - 11:00 AM	88.5	93.5	86.8
11:00 AM - 12:00 PM	88.7	94.5	86.8
12:00 PM - 01:00 PM	88.5	93.3	86.8
01:00 PM - 02:00 PM	88.5	94.0	86.7
02:00 PM - 03:00 PM	88.4	94.0	86.7
03:00 PM - 04:00 PM	88.4	94.4	86.6
04:00 PM - 05:00 PM	88.3	93.8	86.7

Leq Average 8 hrs. (dB(A))

88.5

Lmax (dB(A))

94.5

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496136-1

Page 1 of 1

Sample Number 22132730-18
Parameter Noise (Leq 8 hrs.)
Location PA Fan B
Measurement Date Nov 10, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	87.6	92.4	86.3
10:00 AM - 11:00 AM	87.6	92.9	86.3
11:00 AM - 12:00 PM	87.5	92.7	86.2
12:00 PM - 01:00 PM	88.8	94.1	87.1
01:00 PM - 02:00 PM	88.8	93.2	87.1
02:00 PM - 03:00 PM	88.3	93.6	86.9
03:00 PM - 04:00 PM	88.4	92.8	87.0
04:00 PM - 05:00 PM	88.8	93.1	87.1

Leq Average 8 hrs. (dB(A))

88.3

Lmax (dB(A))

94.1

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Approved by

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Supot Salamteh
Section Head

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496137-1

Page 1 of 1

Sample Number	22132730-19
Parameter	Noise (Leq 8 hrs.)
Location	ID Fan A
Measurement Date	Nov 08, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	82.6	84.5	82.1
10:00 AM - 11:00 AM	82.8	84.6	82.1
11:00 AM - 12:00 PM	83.4	85.3	82.5
12:00 PM - 01:00 PM	83.0	84.8	82.1
01:00 PM - 02:00 PM	82.7	84.5	82.1
02:00 PM - 03:00 PM	82.7	84.5	82.1
03:00 PM - 04:00 PM	82.8	85.2	82.2
04:00 PM - 05:00 PM	82.7	84.5	82.1

Leq Average 8 hrs. (dB(A))

82.8

Lmax (dB(A))

85.3

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496138-1

Page 1 of 1

Sample Number	22132730-20
Parameter	Noise (Leq 8 hrs.)
Location	ID Fan A
Measurement Date	Nov 09, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	83.2	85.2	82.4
10:00 AM - 11:00 AM	83.3	84.9	82.5
11:00 AM - 12:00 PM	83.0	84.5	82.3
12:00 PM - 01:00 PM	83.3	91.0	82.5
01:00 PM - 02:00 PM	83.3	85.2	82.5
02:00 PM - 03:00 PM	83.8	85.5	82.9
03:00 PM - 04:00 PM	83.6	85.5	82.6
04:00 PM - 05:00 PM	83.2	90.1	82.3

Leq Average 8 hrs. (dB(A))

83.3

Lmax (dB(A))

91.0

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

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Supot Salamteh
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496139-1

Page 1 of 1

Sample Number	22132730-21
Parameter	Noise (Leq 8 hrs.)
Location	ID Fan A
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	82.9	84.3	82.2
10:00 AM - 11:00 AM	82.8	84.4	82.1
11:00 AM - 12:00 PM	83.3	85.2	82.6
12:00 PM - 01:00 PM	84.1	86.2	83.2
01:00 PM - 02:00 PM	83.4	90.7	82.8
02:00 PM - 03:00 PM	83.0	89.4	82.3
03:00 PM - 04:00 PM	83.1	85.2	82.4
04:00 PM - 05:00 PM	83.8	85.6	82.9
Leq Average 8 hrs. (dB(A))	83.3		
Lmax (dB(A))		90.7	
Standard (dB(A))	90	140	

Reference Method : ISO1996-1 and 1996-2
 Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย
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Analysis / Test Report

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496140-1

Page 1 of 1

Sample Number	22132730-22
Parameter	Noise (Leq 8 hrs.)
Location	ID Fan B
Measurement Date	Nov 08, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	82.7	84.5	81.9
10:00 AM - 11:00 AM	83.2	85.7	82.3
11:00 AM - 12:00 PM	82.8	86.9	81.9
12:00 PM - 01:00 PM	82.9	85.0	82.1
01:00 PM - 02:00 PM	82.2	84.6	81.5
02:00 PM - 03:00 PM	82.0	84.2	81.3
03:00 PM - 04:00 PM	82.2	84.2	81.3
04:00 PM - 05:00 PM	82.2	84.3	81.5
Leq Average 8 hrs. (dB(A))	82.5		
Lmax (dB(A))		86.9	
Standard (dB(A))	90	140	

Reference Method : ISO1996-1 and 1996-2
 Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496141-1

Page 1 of 1

Sample Number 22132730-23
Parameter Noise (Leq 8 hrs.)
Location ID Fan B
Measurement Date Nov 09, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	82.5	84.4	81.8
10:00 AM - 11:00 AM	82.4	84.3	81.8
11:00 AM - 12:00 PM	82.0	83.7	81.4
12:00 PM - 01:00 PM	81.7	83.2	81.3
01:00 PM - 02:00 PM	82.1	84.4	81.5
02:00 PM - 03:00 PM	82.2	84.1	81.5
03:00 PM - 04:00 PM	81.9	83.6	81.4
04:00 PM - 05:00 PM	81.8	83.1	81.4

Leq Average 8 hrs. (dB(A))

82.1

Lmax (dB(A))

84.4

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Supot Salamteh
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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496142-1

Page 1 of 1

Sample Number 22132730-24
Parameter Noise (Leq 8 hrs.)
Location ID Fan B
Measurement Date Nov 10, 2022
Measurement by Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	82.5	86.4	81.8
10:00 AM - 11:00 AM	82.7	84.8	82.0
11:00 AM - 12:00 PM	82.7	84.3	82.1
12:00 PM - 01:00 PM	82.8	84.8	82.0
01:00 PM - 02:00 PM	82.9	85.1	81.9
02:00 PM - 03:00 PM	83.5	85.4	82.7
03:00 PM - 04:00 PM	82.6	84.9	81.7
04:00 PM - 05:00 PM	82.2	84.4	81.5

Leq Average 8 hrs. (dB(A))

82.8

Lmax (dB(A))

86.4

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย
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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496143-1

Page 1 of 1

Sample Number	22132730-25
Parameter	Noise (Leq 8 hrs.)
Location	FGD Air Blower
Measurement Date	Nov 08, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	84.4	86.0	84.0
10:00 AM - 11:00 AM	84.3	85.6	84.0
11:00 AM - 12:00 PM	84.1	85.2	83.9
12:00 PM - 01:00 PM	84.3	85.8	83.9
01:00 PM - 02:00 PM	84.3	85.8	84.0
02:00 PM - 03:00 PM	84.3	85.9	83.8
03:00 PM - 04:00 PM	84.0	85.5	83.6
04:00 PM - 05:00 PM	84.1	85.6	83.8

Leq Average 8 hrs. (dB(A))

84.2

Lmax (dB(A))

86.0

Standard (dB(A))

90

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496144-1

Page 1 of 1

Sample Number	22132730-26
Parameter	Noise (Leq 8 hrs.)
Location	FGD Air Blower
Measurement Date	Nov 09, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	84.0	85.0	83.7
10:00 AM - 11:00 AM	83.9	85.0	83.6
11:00 AM - 12:00 PM	84.0	84.9	83.7
12:00 PM - 01:00 PM	84.0	85.1	83.8
01:00 PM - 02:00 PM	83.9	84.9	83.7
02:00 PM - 03:00 PM	84.0	85.0	83.8
03:00 PM - 04:00 PM	83.9	85.1	83.7
04:00 PM - 05:00 PM	84.0	85.0	83.7

Leq Average 8 hrs. (dB(A))

84.0

Lmax (dB(A))

85.1

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496145-1

Page 1 of 1

Sample Number	22132730-27
Parameter	Noise (Leq 8 hrs.)
Location	FGD Air Blower
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	84.1	85.7	83.7
10:00 AM - 11:00 AM	84.3	86.0	83.8
11:00 AM - 12:00 PM	84.2	85.9	83.8
12:00 PM - 01:00 PM	84.2	85.5	83.8
01:00 PM - 02:00 PM	84.1	85.6	83.8
02:00 PM - 03:00 PM	84.0	85.0	83.7
03:00 PM - 04:00 PM	84.0	85.3	83.7
04:00 PM - 05:00 PM	83.9	85.2	83.7

Leq Average 8 hrs. (dB(A))

84.1

Lmax (dB(A))

86.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496146-1

Page 1 of 1

Sample Number	22132730-28
Parameter	Noise (Leq 8 hrs.)
Location	Condenser
Measurement Date	Nov 08, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	86.6	88.1	86.2
10:00 AM - 11:00 AM	86.5	93.0	86.1
11:00 AM - 12:00 PM	86.9	88.7	85.6
12:00 PM - 01:00 PM	87.3	88.6	87.0
01:00 PM - 02:00 PM	87.3	88.7	87.0
02:00 PM - 03:00 PM	86.7	88.4	86.2
03:00 PM - 04:00 PM	85.9	87.7	85.4
04:00 PM - 05:00 PM	86.3	88.5	85.7

Leq Average 8 hrs. (dB(A))

86.7

Lmax (dB(A))

93.0

Standard (dB(A))

90

140

Reference Method : ISO1996-1 and 1996-2

Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัย

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496147-1

Page 1 of 1

Sample Number	22132730-29
Parameter	Noise (Leq 8 hrs.)
Location	Condenser
Measurement Date	Nov 09, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	86.8	88.6	86.1
10:00 AM - 11:00 AM	86.4	88.1	85.8
11:00 AM - 12:00 PM	86.3	87.9	85.9
12:00 PM - 01:00 PM	86.2	89.1	85.7
01:00 PM - 02:00 PM	86.9	88.4	86.5
02:00 PM - 03:00 PM	86.6	88.5	85.5
03:00 PM - 04:00 PM	86.4	88.0	85.8
04:00 PM - 05:00 PM	85.9	87.5	85.5
Leq Average 8 hrs. (dB(A))	86.4		
Lmax (dB(A))		89.1	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัยในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED

11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O : GLOW-OM-22-103

Project Name :

Project Location : GHECO-ONE

Lot ID: 22132730

Date Received : Nov 15, 2022

Date Reported : Nov 21, 2022

Report Number: 2496148-1

Page 1 of 1

Sample Number	22132730-30
Parameter	Noise (Leq 8 hrs.)
Location	Condenser
Measurement Date	Nov 10, 2022
Measurement by	Jakkarin Manwicha

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
09:00 AM - 10:00 AM	86.1	87.9	85.5
10:00 AM - 11:00 AM	86.3	88.4	85.7
11:00 AM - 12:00 PM	86.3	88.5	85.7
12:00 PM - 01:00 PM	86.4	88.2	85.9
01:00 PM - 02:00 PM	86.8	88.3	86.5
02:00 PM - 03:00 PM	87.1	88.6	86.7
03:00 PM - 04:00 PM	87.3	88.9	86.8
04:00 PM - 05:00 PM	87.3	89.4	86.6
Leq Average 8 hrs. (dB(A))	86.7		
Lmax (dB(A))		89.4	
Standard (dB(A))	90	140	
Reference Method : ISO1996-1 and 1996-2			
Standard : ประกาศกระทรวงอุตสาหกรรม เรื่อง มาตรฐานการคุ้มครองความปลอดภัยในการประกอบกิจการโรงงานเกี่ยวกับสภาวะแวดล้อมในการทำงาน พ.ศ.๒๕๕๖			

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Technical Management

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Thanita Kulsuriwong
Scientist (4)

Approved by

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ระดับเสียงเฉลี่ยตลอดเวลาการทำงาน



Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22103865

Date Received : Aug 24, 2022

Date Reported : Aug 27, 2022

Report Number : 2411743-1

Page 1 of 3

Sample Number	22103865-1
Sampled Date	Aug 23, 2022
Sample Description	Noise Dose
Location	จุดพักรถ ค. (F03)
Personal Sampling	จุดพักรถ ฝั่งตรงข้าม
Date Analysis Commenced	Aug 26, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	58.9	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	55.0	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	80.7	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	82.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Supot Salamteh

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22103865

Date Received : Aug 24, 2022

Date Reported : Aug 27, 2022

Report Number : 2411743-1

Page 2 of 3

Sample Number	22103865-2
Sampled Date	Aug 23, 2022
Sample Description	Noise Dose
Location	จุดพักรถ ม. (F07)
Personal Sampling	จุดพักรถ ฝั่งตรงข้าม
Date Analysis Commenced	Aug 26, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	37.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	35.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	78.7	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	80.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Supot Salamteh

Remark :

- LOD : Limit of Detection
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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22103866

Date Received : Aug 31, 2022

Date Reported : Sep 03, 2022

Report Number : 2411750-1

Page 1 of 4

Sample Number 22103866-1
Sampled Date Aug 30, 2022
Sample Description Noise Dose
Location อุบลประสิทธิ์พร ก.
Personal Sampling อุบลประสิทธิ์พร กล่อมเกลี้ยง
Date Analysis Commenced Sep 02, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	7.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	73.5	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

Sampled By : Supot Salamteh

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 22103866

Date Received : Aug 31, 2022

Date Reported : Sep 03, 2022

Report Number : 2411750-1

Page 2 of 4

Sample Number 22103866-2
Sampled Date Aug 30, 2022
Sample Description Noise Dose
Location อุบลประสิทธิ์พร ก.
Personal Sampling อุบลประสิทธิ์พร กล่อมเกลี้ยง
Date Analysis Commenced Sep 02, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	<1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	59.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

Sampled By : Supot Salamteh

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

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Assistant Manager

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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22103866
Date Received : Aug 31, 2022
Date Reported : Sep 03, 2022
Report Number : 2411750-1

Sample Number 22103866-3
Sampled Date Aug 30, 2022
Sample Description Noise Dose
Location กรุงเทพมหานคร.
Personal Sampling กรุงเทพมหานคร เขตบางนา
Date Analysis Commenced Sep 02, 2022

Page 3 of 4

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	27.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	79.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Supot Salameh

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 22103866
Date Received : Aug 31, 2022
Date Reported : Sep 03, 2022
Report Number : 2411750-1

Sample Number 22103866-4
Sampled Date Aug 30, 2022
Sample Description Noise Dose
Location กรุงเทพมหานคร.
Personal Sampling กรุงเทพมหานคร เขตบางนา
Date Analysis Commenced Sep 02, 2022

Page 4 of 4

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	08:30 AM - 04:30 PM	%	-	1	1.6	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	08:30 AM - 04:30 PM	dB(A)	-	-	66.9	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
Sampled By : Supot Salameh

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293874

Date Received : Aug 19, 2022
Date Reported : Aug 23, 2022
Report Number : 2390551-1

Page 1 of 7

Sample Number : 2293874-1
Sampled Date : Aug 16, 2022
Sample Description : Noise Dose (12 hrs.)
Location : อุบลรัตน์ อ. (FO7)
Personal Sampling : อุบลรัตน์ อ. (FO7)
Date Analysis Commenced : Aug 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	%	-	-	52.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:30 AM - 07:30 PM	%	-	1	50.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	dB(A)	-	-	80.2	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:30 AM - 07:30 PM	dB(A)	-	-	82.0	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Supot Salarnthet

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293874

Date Received : Aug 19, 2022
Date Reported : Aug 23, 2022
Report Number : 2390551-1

Page 2 of 7

Sample Number : 2293874-2
Sampled Date : Aug 16, 2022
Sample Description : Noise Dose (12 hrs.)
Location : อุบลรัตน์ อ. (FO6)
Personal Sampling : อุบลรัตน์ อ. (FO6)
Date Analysis Commenced : Aug 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	%	-	-	61.7	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:30 AM - 07:30 PM	%	-	1	57.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	dB(A)	-	-	80.9	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:30 AM - 07:30 PM	dB(A)	-	-	82.6	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Supot Salarnthet

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :
Project Location : GHECO-ONE

Lot ID: 2293874

Date Received : Aug 19, 2022

Date Reported : Aug 23, 2022

Report Number : 2390551-1

Page 3 of 7

Sample Number	2293874-3
Sampled Date	Aug 16, 2022
Sample Description	Noise Dose (12 hrs.)
Location	จุดตรวจ น. (FO2)
Personal Sampling	จุดตรวจ น. (FO2)
Date Analysis Commenced	Aug 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	%	-	-	6.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:30 AM - 07:30 PM	%	-	1	6.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:30 AM - 07:30 PM	dB(A)	-	-	71.1	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:30 AM - 07:30 PM	dB(A)	-	-	72.9	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Supot Salamteh

Remark :

- LOD : Limit of Detection
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Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :
Project Location : GHECO-ONE

Lot ID: 2293874

Date Received : Aug 19, 2022

Date Reported : Aug 23, 2022

Report Number : 2390551-1

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Sample Number	2293874-4
Sampled Date	Aug 18, 2022
Sample Description	Noise Dose (12 hrs.)
Location	จุดตรวจ น. (ASM)
Personal Sampling	จุดตรวจ น. (ASM)
Date Analysis Commenced	Aug 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	2.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	2.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	66.7	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	68.4	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Supot Salamteh

Remark :

- LOD : Limit of Detection
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Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Client : GHECO-ONE COMPANY LIMITED
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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293874

Date Received : Aug 19, 2022

Date Reported : Aug 23, 2022

Report Number : 2390551-1

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Sample Number	2293874-5
Sampled Date	Aug 18, 2022
Sample Description	Noise Dose (12 hrs.)
Location	คุณเชิดศักดิ์ ส. (Shift Manager)
Personal Sampling	คุณเชิดศักดิ์ ส. (Shift Manager)
Date Analysis Commenced	Aug 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	9.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	8.5	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	72.6	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	74.3	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Supot Salamteh

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Wichan Choonharat

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Assistant Manager

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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293874

Date Received : Aug 19, 2022

Date Reported : Aug 23, 2022

Report Number : 2390551-1

Page 6 of 7

Sample Number	2293874-6
Sampled Date	Aug 18, 2022
Sample Description	Noise Dose (12 hrs.)
Location	คุณศราวุธ พ. (ASM)
Personal Sampling	คุณศราวุธ พ. (ASM)
Date Analysis Commenced	Aug 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	3.6	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	3.3	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	68.5	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	70.2	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Supot Salamteh

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293874

Date Received : Aug 19, 2022

Date Reported : Aug 23, 2022

Report Number : 2390551-1

Page 7 of 7

Sample Number	2293874-7
Sampled Date	Aug 18, 2022
Sample Description	Noise Dose (12 hrs.)
Location	จุดตรวจวัด อ. (FO6)
Personal Sampling	จุดตรวจวัด ควทท
Date Analysis Commenced	Aug 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	%	-	-	67.6	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
Noise Dose (8 hrs.)	07:00 AM - 07:00 PM	%	-	1	61.7	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (12 hrs.) (Calculated from Lavg)	07:00 AM - 07:00 PM	dB(A)	-	-	81.3	83*	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	07:00 AM - 07:00 PM	dB(A)	-	-	82.9	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

- MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)
* MOL: Recommended guideline limit for 12 working hours should not be over 83 dB(A)

Sampled By : Supot Salameh

Remark :

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Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
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P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293876

Date Received : Aug 19, 2022

Date Reported : Aug 23, 2022

Report Number : 2390552-1

Page 1 of 2

Sample Number	2293876-1
Sampled Date	Aug 17, 2022
Sample Description	Noise Dose (8 hrs.)
Location	จุดตรวจวัด ม. (C&I)
Personal Sampling	จุดตรวจวัด สรเวียง
Date Analysis Commenced	Aug 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	09:30 AM - 05:30 PM	%	-	1	6.2	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	09:30 AM - 05:30 PM	dB(A)	-	-	72.9	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

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2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

Sampled By : Supot Salameh

Remark :

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Wichan Choonharat
Assistant Manager

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Analysis / Test Report

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11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O :
Project Name :
Project Location : GHECO-ONE

Lot ID: 2293876
Date Received : Aug 19, 2022
Date Reported : Aug 23, 2022
Report Number : 2390552-1

Page 2 of 2

Sample Number : 2293876-2
Sampled Date : Aug 17, 2022
Sample Description : Noise Dose (8 hrs.)
Location : อุบลราชธานี อ. (Macnic)
Personal Sampling : อุบลราชธานี อ. (Macnic)
Date Analysis Commenced : Aug 22, 2022

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Noise Dose (8 hrs.)	09:30 AM - 05:30 PM	%	-	1	33.1	No Standard	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok
TWA (8 hrs.)	09:30 AM - 05:30 PM	dB(A)	-	-	80.2	85	MOL, Department Labour Protection and Welfare (B.E.2561)	MOL	Bangkok

Guideline :

MOL : 1. Notification of Department Labour Protection and Welfare on the Criteria and Procedures for Measurement and Analysis of Working Conditions in relation to Heat, Light or Noise Levels, including Duration and Types of Business that must perform (B.E. 2561)
2. Notification of Department of Labour Protection and Welfare on the Standard of Time Weighted Average (TWA) Noise Level (B.E. 2561)

Sampled By : Supot Salamteh

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Wichan Choonharat

Wichan Choonharat
Assistant Manager

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293872

Date Received : Aug 19, 2022

Date Reported : Aug 25, 2022

Report Number : 2390549-1

Page 1 of 2

Sample Number 2293872-1
Sampled Date Aug 16, 2022
Sample Description Air Quality
Location ฝั่งใต้ของกองด่านหิน
Date Analysis Commenced Aug 23, 2022
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 755 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Tarin Octjinda

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150

P/O :

Project Name :

Project Location : GHECO-ONE

Lot ID: 2293872

Date Received : Aug 19, 2022

Date Reported : Aug 25, 2022

Report Number : 2390549-1

Page 2 of 2

Sample Number 2293872-2
Sampled Date Aug 16, 2022
Sample Description Air Quality
Location ฝั่งใต้ของกองด่านหิน
Date Analysis Commenced Aug 23, 2022
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 755 mmHg
Atmospheric Temperature 30.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :

OSHA : Occupational Safety and Health Administration

Sampled By : Tarin Octjinda

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132731
Date Received : Nov 15, 2022
Date Reported : Nov 21, 2022
Report Number : 2478249-1

Page 1 of 2

Sample Number 22132731-1
Sampled Date Nov 14, 2022
Sample Description Air Quality
Location ฝั่งเหนือของคลองด่านหิน
Date Analysis Commenced Nov 15, 2022
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Jakkarin Manwicha
Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

Approved by

Thanita K.

Thanita Kulsuriwong
Scientist (4)

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Analysis / Test Report

Client : GHECO-ONE COMPANY LIMITED
11, I-5 Road, Map Ta Phut, Muang, Rayong Thailand 21150
P/O : GLOW-OM-22-103
Project Name :
Project Location : GHECO-ONE

Lot ID: 22132731
Date Received : Nov 15, 2022
Date Reported : Nov 21, 2022
Report Number : 2478249-1

Page 2 of 2

Sample Number 22132731-2
Sampled Date Nov 14, 2022
Sample Description Air Quality
Location ฝั่งใต้ของคลองด่านหิน
Date Analysis Commenced Nov 15, 2022
Condition of Sample Drawn into one filter paper placed in plastic cassette
Barometric Pressure 756 mmHg
Atmospheric Temperature 32.0 °C

Analyte	Sampled Date/time	Unit	LOD	LOQ (LOR)	Result	Guideline Limit	Method	Guideline	Testing Location
Air Testing									
Total Dust	09:00 AM - 11:00 AM	mg/m3	-	0.15	<0.15	15	Based on NIOSH (1994), 0500	OSHA	Rayong

Guideline :
OSHA : Occupational Safety and Health Administration
Sampled By : Jakkarin Manwicha
Remark :
- LOD : Limit of Detection
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